

Household Analysis Review Group (HARG)

Developing the methodology for incorporating survey data into household projections

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Note

The results presented in this paper are provisional. They may differ from the final figures used in the published household projections. Please treat these figures as 'restricted' until after publication in June, and do not pass them on to anyone else without prior agreement from National Records of Scotland (NRS).

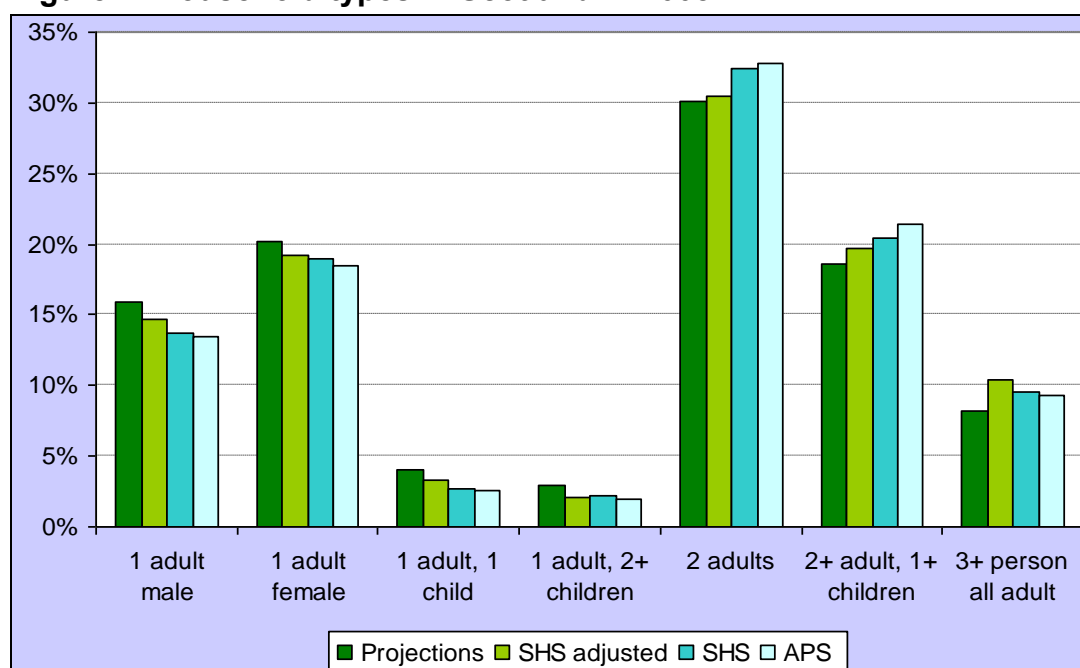
1. Background

The current household projections are based on projecting headship rates calculated from census data that is published every 10 years. This means that the projections do not take into account changes in trends beyond the latest census year. Constraining the total number of projected households to household estimates based on council tax data is one way in which we attempt to take account of more recent trends, however this data does not contain any information on the types of household in Scotland.

More recent information on the types of household in Scotland can be obtained from [the Survey Data](#), available on the NRS website. Analysis of the survey data that is currently available in Scotland was previously reported to Household Analysis Review Group (HARG).

In summary, data is available from the Scottish Household Survey (SHS) and the Labour Force Survey (LFS), now incorporated into the Annual Population Survey (APS). This data suggests that recently, the trends shown in census data for increasing proportions of one-adult households and decreasing proportions of larger households are slowing. This can be seen in Figure 1 below, where proportions from the 2008 principal projection are compared with survey results.

Figure 1: Household types in Scotland in 2008¹



These trends are not taken account of in the household projections, but it might be expected that fewer one-adult household and more multi-adult households would lead to lower total household numbers than the current projections suggest. Consultation with the Population and Migration Statistics (PAMS) and HARG members suggest that Local Authority (LA) members feel that this is what they are seeing in their areas.

Footnotes

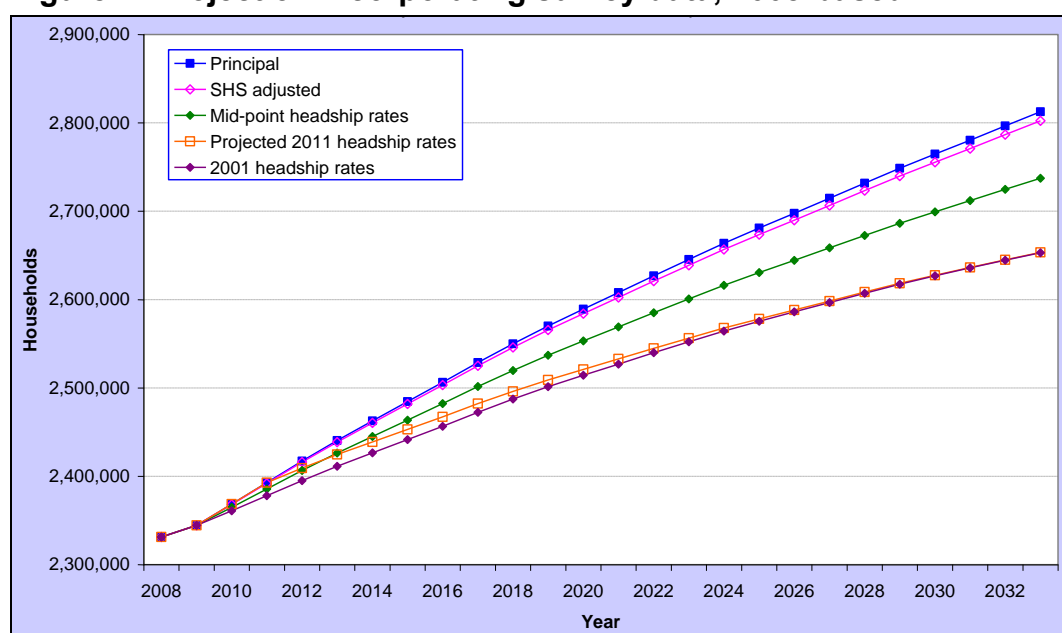
1) This figure was taken from: [Paper 4 HARG 2011\(4\)](#).

An initial methodology was developed that adjusts the proportion of households of each type, at the Scotland level, using SHS data for the base year. This adjustment is weighted, so that the weight given to the survey data depends on the length of time since the last census. The maximum weight given to the survey data is 0.5, ten years after the last census, so when data is adjusted to survey data from 2007, 6 years after the census, it is given a weighting of 0.3². A diagram comparing the projection methodology for the principal projection and the adjusted projections presented in this paper can be seen at [Annex A](#).

This method produced a projection that was slightly below the principal household projection (Figure 2). For local authorities the decrease in total household numbers was between 0.13% and 0.5% for the 2008-based projection. The effect of introducing the survey adjustments was much smaller than those of varying the headship rate. In the principal projection headship rates are projected using a modified exponential curve from 1991 and 2001 census data. For the variants below the alternatives used were:

- using the headship rates from the 2001 census for each projection year (2001 headship rates)
- taking the 'midpoint' between (1) and the headship rates used in the principal projection (Mid-point headship rates)
- using the census-based projection of headship rates up to 2011, then using the 2011 rates for each subsequent year (Projected 2011 headship rates).

Figure 2: Projection incorporating survey data, 2008-based³



Footnotes

2) This is the weight used in HARG 2011 (4). The weighting scheme is that used by the Office of National Statistics to incorporate survey data into the English and Welsh household projections.

3) This graph compares the principal 2008-based projection with the projection incorporating survey data (SHS adjusted) and projections using different headship rates. Further details can be found in [Paper 6 HARG 2011 \(6\)](#) on the National Records of Scotland (NRS) website.

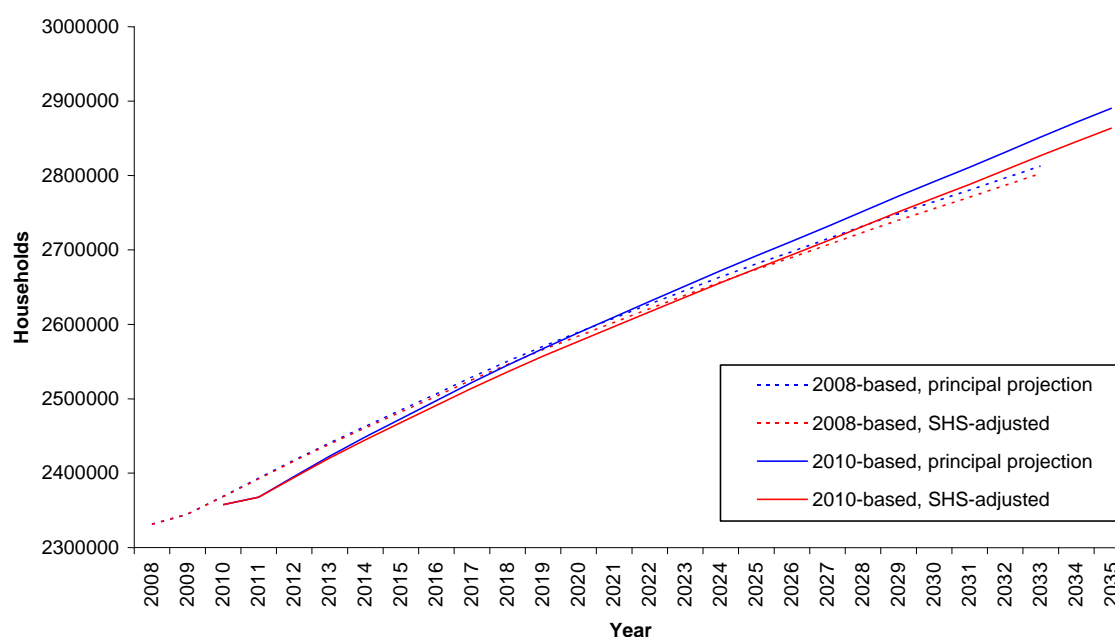
2. 2010-based update (existing methodology)

The work described in [section 1](#) was developed using the 2008-based household projections. As the data for the 2010-based household projections is now available this work has been updated, using identical methodology, so that the results presented from this point on are based on the same input data. The inputs used are:

- 2010-based sub-national population projections;
- 2010-based communal establishment estimates (provisional);
- 2010 and 2011 (provisional) household estimates;
- Scottish Household Survey (SHS) data from 1999/2000 to 2009/10.

The updated projections are shown in Figure 3. This survey adjusted household projection has decreased numbers of households in each LA (between 0.4% and 1.3%) compared to the principal 2010-based household projection. At least part of the increased effect of the survey adjustment, compared to that found in 2008, is because the incorporation of two additional years of SHS data increased the weighting given to the SHS data.

Figure 3: 2008 and 2010-based household projections



3. Moving forward

The work described above starts to incorporate survey data into the projections, but may not exploit the maximum amount of information available from the SHS. Additional information is available:

- At the sub-national level. The earlier investigation showed that using data at LA level is not feasible because there is high year-on-year variation, due to the smaller sample sizes. Discussions at Household Analysis Review Group (HARG) in 2011 suggested that we should investigate grouping local authorities to see if this produced sub-

national data that could be applied to groups of local authorities (e.g. urban/rural groups).

- Regarding trend. The methodology described above incorporates differences between the survey proportions and the projected proportions in the base year, and adjusts for this difference in all future years, but it does not make any use of the trend information in the data, which suggests that the slowing in the household size is an ongoing trend. A methodology that projects the trends seen in the survey data for future years and then incorporates this into the projection may improve the projection.

This paper will describe the work that has been done to investigate the additional data described above and incorporate it into the household projections.

4. Using sub-national survey data

This section of the paper investigates how to classify local authorities into urban or rural groups and investigates the Scottish Household Survey (SHS) data for these groups. It then goes on to adjust the principal projection at the urban-rural level and compares this to both the principal projection and the projection adjusted to SHS data at the Scotland level.

4.1 Urban / rural classifications

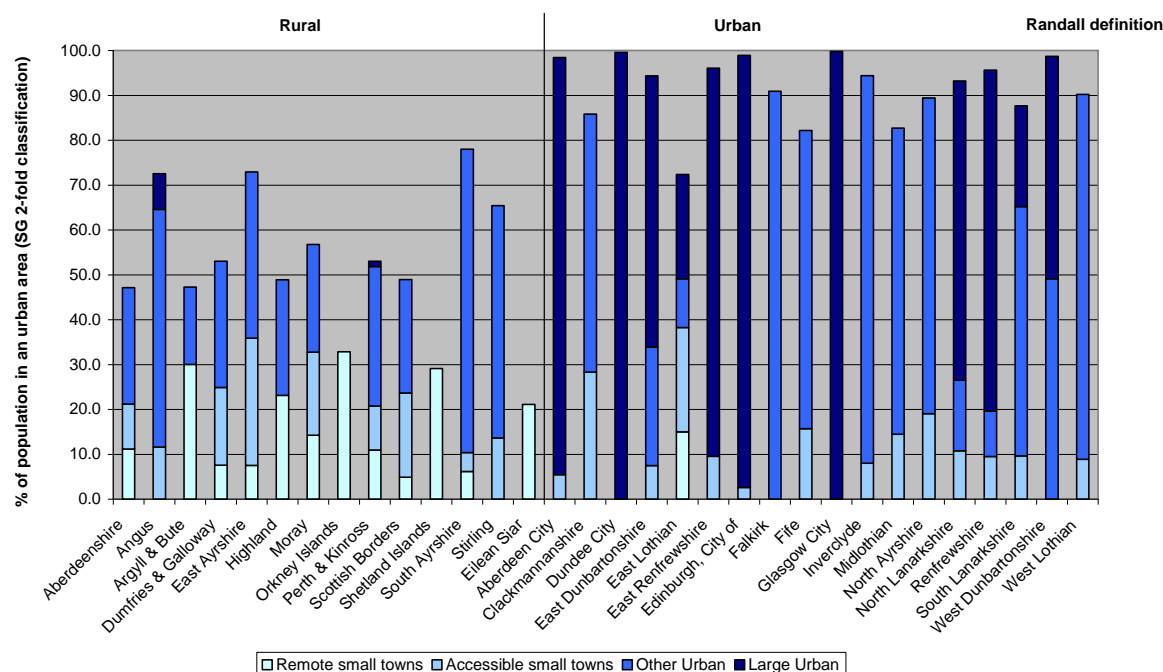
Previous work suggests that the SHS is currently the only survey that is appropriate for our use as it is the only survey that can be matched to the 2001 census. It is designed to provide a nationally representative sample each quarter, a representative sample for larger local authorities each year and a representative sample for every local authority every two years.

The Scottish Government (SG) publishes an urban/rural classification, which classifies small areas (e.g. datazones) according to an 8-fold classification, which can be compressed to a 6-fold or 2-fold classification. It can be used to give a percentage of the population of each local authority which lives in an urban or rural area, but cannot classify local authorities as urban or rural. To classify local authorities as urban or rural the SG recommend using the Randall definition which is 'where a unitary authority has a population density of less than one person per hectare it is considered Rural.' On this basis there are 14 rural authorities ([Figure 4](#)).

In order to assess whether this seems to be a useful classification for our purposes, the Randall definition was compared with the SG urban/rural classification. [Figure 4](#) shows the percentage of the population of each local authority that is in an urban area. Each column is subdivided according to the 6-fold classification. Those authorities left of the vertical line are classed as rural according to the Randall definition, while those that are classed as urban are on the right. It can be seen that all but one urban Local Authority (LA) has over 80% of their population in urban areas, and all of the rural local authorities has under 80% of their population in urban areas, and that these local authorities have a much larger portion of their population in small towns. The exception to this is East Lothian, which is classed as Urban according to the Randall definition, but has less than 80% of the population in urban areas. It does, however, have a

much larger share of its population in large urban areas than any of the rural local authorities. The Randall definition, therefore, seems to be a reasonable division of local authorities for initial analysis.

Figure 4: Comparing the SG Urban Rural Classification with the Randall Definition

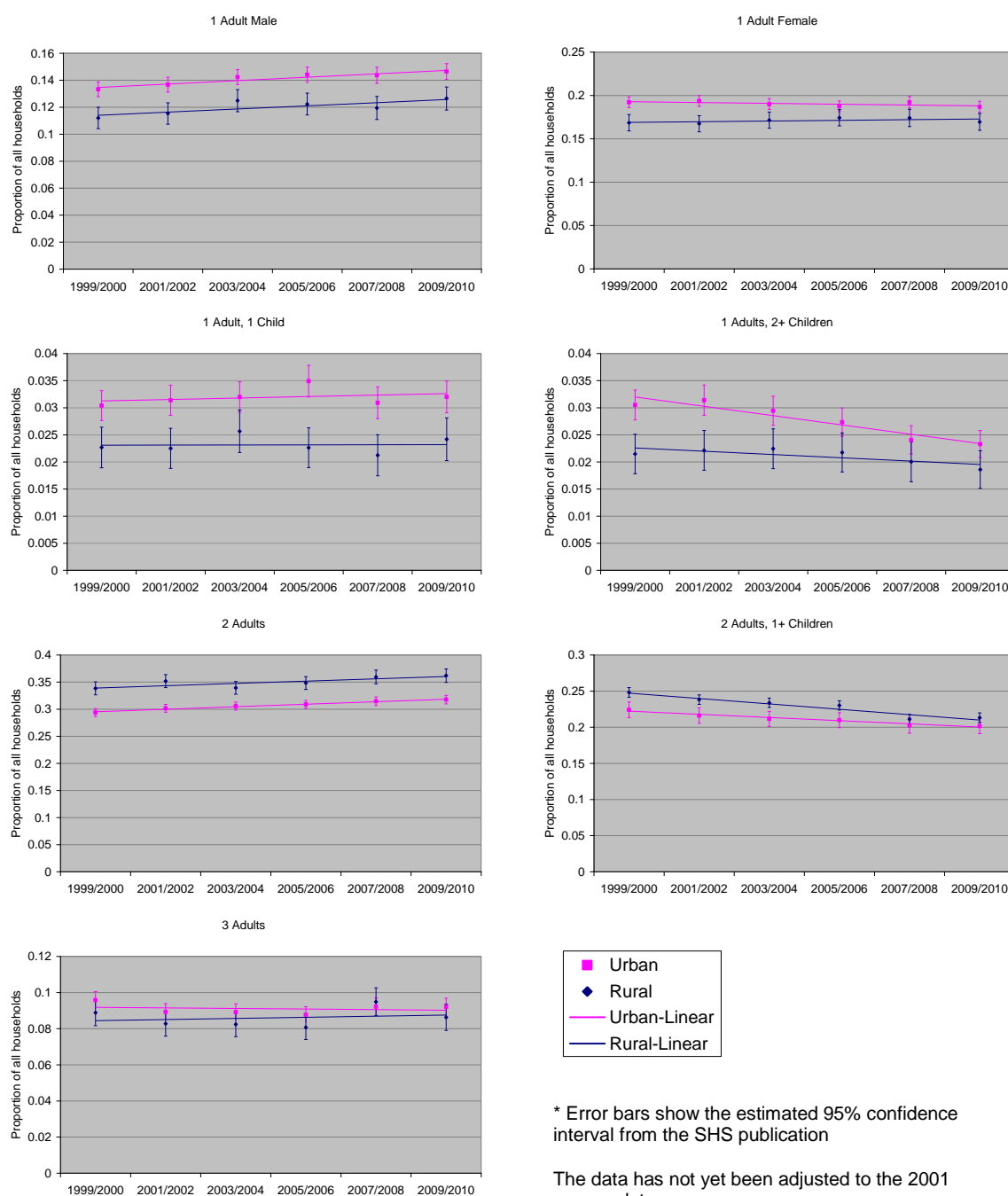


4.2 SHS data for urban and rural local authorities

The proportion of households in each household type, according to SHS data from 1999 to 2009, for urban and rural authorities, can be seen in [Figure 5](#). This shows that:

- There are significant differences between the proportions for urban and rural areas in the smaller household types in the majority of years (one adult male, one adult female, two adults, one adult one child).
- There is little difference in the trend over time between the urban and rural areas. This was confirmed by investigating the 95% confidence intervals for the slope of the linear regression for each group. For most household types, and areas, the slope was not significantly different from zero (which would indicate that there is little change over time). This may, nevertheless, be important where census data is suggesting an increasing or a decreasing trend.

The significant differences in the proportions between urban and rural types suggest that it may be worthwhile applying any adjustments at an urban/rural, rather than Scotland-wide level.

Figure 5: Urban/Rural Comparison of unadjusted SHS-data*

4.3 Adjusting the projections for urban and rural areas

The next step was to adjust the household projections for urban and rural local authorities separately. The methodology of the adjustment was identical to that described above, except that the household proportions calculated and compared were those for the urban and rural groups of authorities, as well as for Scotland as a whole. Different adjustment figures were then applied to each Local Authority (LA), depending on whether it is in the urban or rural group. In this section the adjustments are only related to the base year, as in the projections described above. As the Scottish Household Survey (SHS) data is more robust at Scotland level than at the local authority level, the urban/rural adjusted projections are still constrained to the overall Scottish adjusted projection, after survey adjustment.

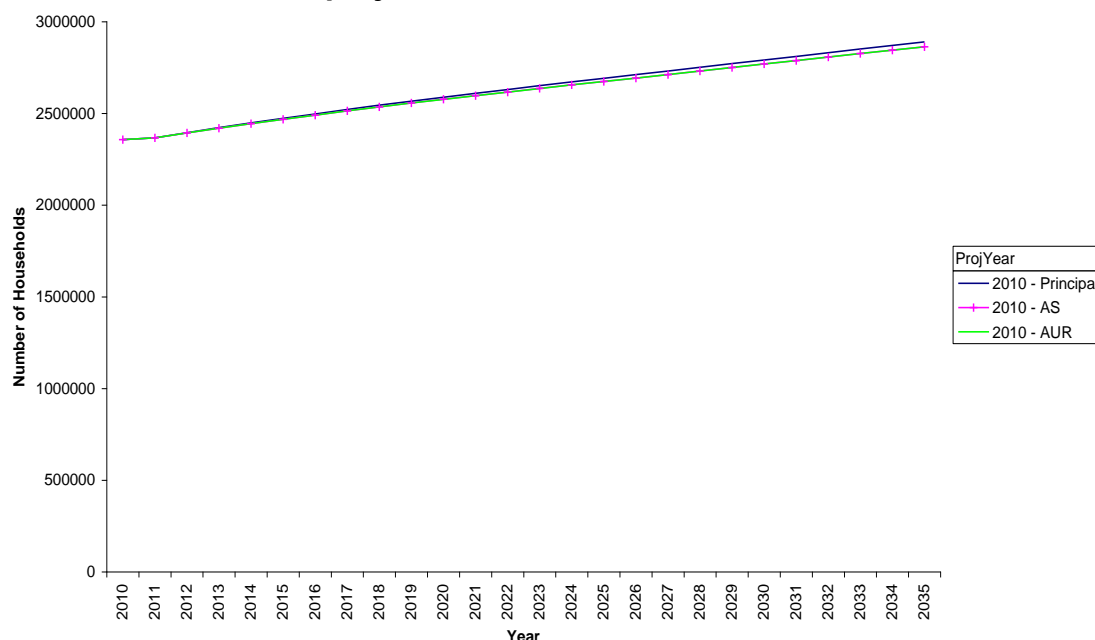
The Adjusted Urban/Rural (AUR) Projection is compared to the results of adjusting at the Scotland level (Adjusted Scotland - AS) and the draft 2010-based principal household projection.

Effects on household numbers

As the Local Authority (LA) projections are constrained to the Scottish projection after survey adjustment there is little difference between the two SHS adjusted household projections for Scotland overall ([Figure 6](#)).

[Table B-1](#) (Annex B) shows the household numbers and there very small differences between the projections can be seen, caused by the different household estimate and minimum adult adjustments required, as these are applied after the LA projections are constrained to the Scottish projection.

Figure 5: Comparison of the adjustment methods for the 2010-based household projections for Scotland.



In both projections, the adjustments lead to decreased numbers of one adult households, with or without children, and increased numbers of multi-adult households ([Figure 7](#)), and again there are only very small differences between adjusting at the Scotland level and AUR projections, for the reasons described above.

Adjusting by urban-rural grouping does, however, lead to differences in the total numbers of households for individual authorities (Figure 8). The overall differences between the two adjusted projections for each LA are relatively small (-0.05% to 0.11%, -140 to +105 households), but differences for particular household types are larger (Table 1). This is because in the overall household numbers differences in some household types partially compensate for differences in other household types. Data for individual local authorities can be seen in Table B-2 (Annex B).

Figure 6: Comparison of the household numbers between the SHS-adjusted projections and the principal projection for Scotland at 2035, by household type

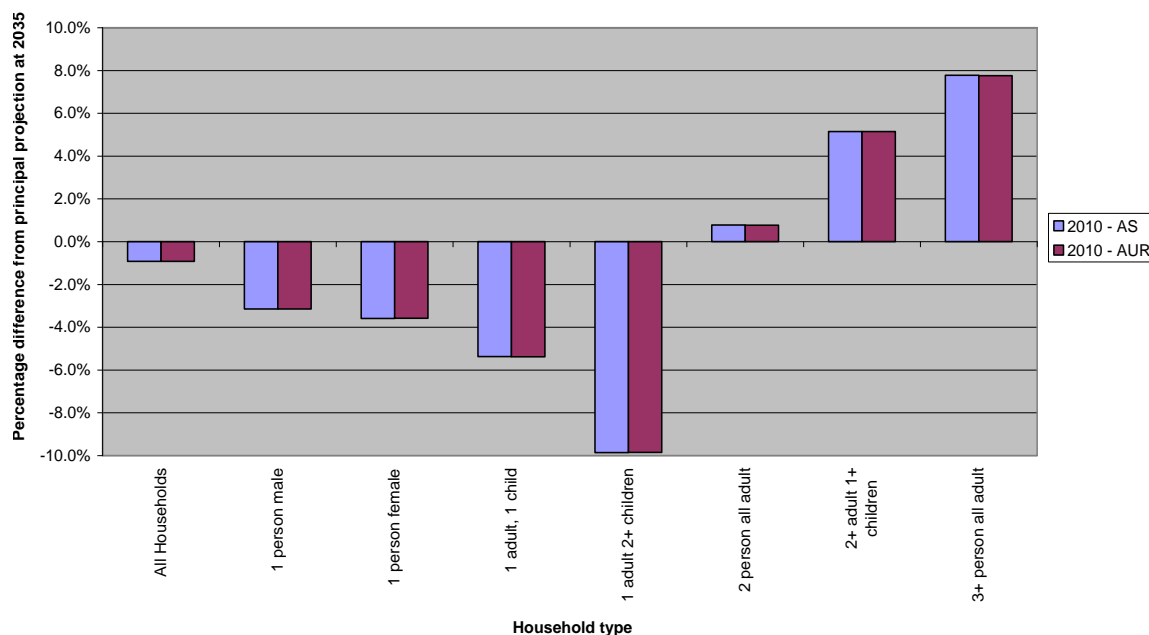


Figure 7: Comparison of the household numbers between the SHS-adjusted projections and the principal projection at 2035

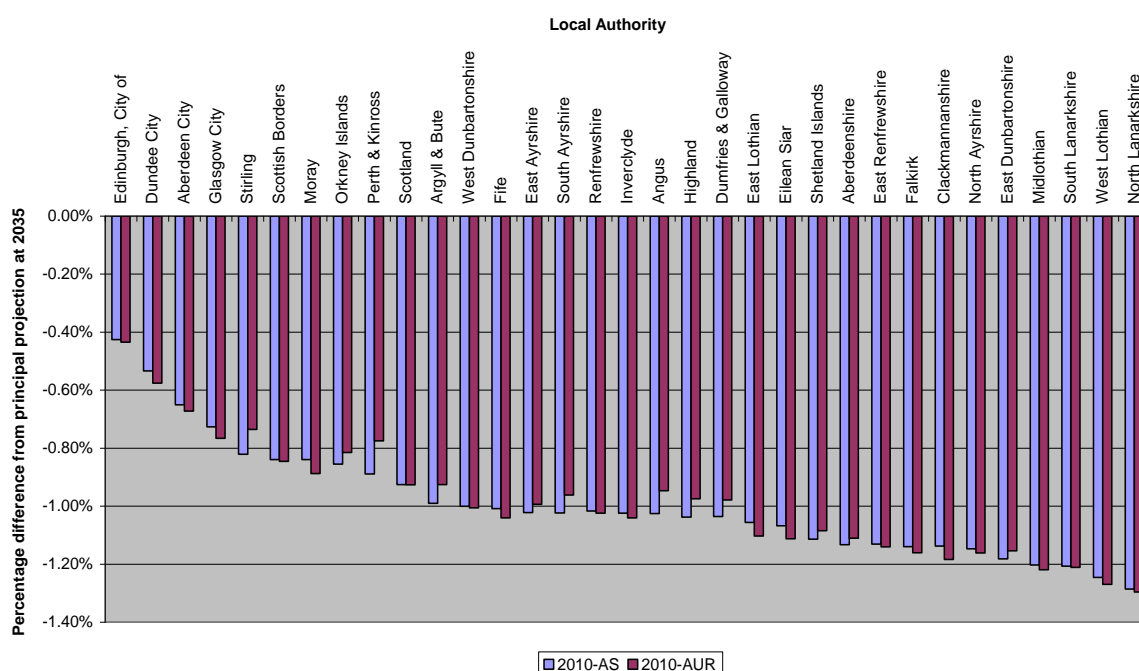


Table 1: The range of local authority differences between projections for each household type at 2035

Household Type	Projection	Difference (%)	
		Min	Max
All Households	AUR v AS	-0.05%	0.11%
	AS v principal	-1.29%	-0.43%
	AUR v principal	-1.30%	-0.43%
1 person male	AUR v AS	-0.57%	1.42%
	AS v principal	-4.13%	-0.98%
	AUR v principal	-4.68%	-1.20%
1 person female	AUR v AS	-0.73%	1.64%
	AS v principal	-4.51%	-1.29%
	AUR v principal	-5.22%	-1.62%
1 adult, 1 child	AUR v AS	-0.86%	2.77%
	AS v principal	-6.43%	-1.11%
	AUR v principal	-7.21%	-1.46%
1 adult 2+ children	AUR v AS	-1.31%	3.39%
	AS v principal	-	-
	AUR v principal	10.90%	-2.85%
2 person all adult	AUR v AS	-	-
	AS v principal	11.99%	-3.29%
	AUR v principal	-	-
2+ adult 1+ children	AUR v AS	-2.12%	1.13%
	AS v principal	-1.07%	1.77%
	AUR v principal	-1.76%	2.92%
3+ person all adult	AUR v AS	-0.77%	1.52%
	AS v principal	0.95%	6.26%
	AUR v principal	0.95%	6.71%
	AUR v AS	-1.16%	4.55%
	AS v principal	4.35%	8.84%
	AUR v principal	3.36%	11.47%

Effects on the household estimate adjustments

One of the last steps in the household projection process is to adjust the projected household numbers to the household estimates for 2010 and 2011. This step occurs after the projections are adjusted to the SHS household proportions, therefore if the size of the household estimate adjustment needed for the SHS-adjusted projections is smaller than the adjustment needed for the principal projection the SHS-adjusted projections could be considered to be 'better' than the principal projection as they are closer to the household estimate.

[Table 2](#) compares the household estimate adjustments for both survey-adjusted projections to those made for the principal projection, for both 2010 and 2011. From this table it seems that there is little to choose between the two projections; AUR performs better than the principal projections in slightly more local authorities than AS in 2010, but the reverse is true in 2011. If AUR is compared directly to AS, however, it can be seen that the adjustments are greater (a worse outcome) in the urban-rural adjusted projection than the Scotland-adjusted projection in the majority of local authorities in both years ([Table 2](#)). This suggests that it may be preferable to adjust the projections at the Scotland level rather than at urban/rural level; however it should be noted that the scale of the differences between the two projections are actually very small, ranging from -0.2% to +0.4%.

Table 2: Comparison of the household estimate adjustments for the survey-adjusted and principal projections

Performance compared to: Projection year Projection		Principal projection				AS	
		2010		2011		2010	2011
		AS	AUR	AS	AUR	AUR	AUR
SCOTLAND		Same	Same			Same	Same
URBAN	Aberdeen City						
	Clackmannanshire						
	Dundee City						
	East Dunbartonshire						
	East Lothian						
	East Renfrewshire						
	Edinburgh, City of						
	Falkirk						
	Fife						
	Glasgow City						
	Inverclyde						
	Midlothian						
	North Ayrshire						
	North Lanarkshire						
	Renfrewshire						
	South Lanarkshire						
	West Dunbartonshire						
	West Lothian						
RURAL	Aberdeenshire						
	Angus						
	Argyll & Bute						
	Dumfries & Galloway						
	East Ayrshire						
	Eilean Siar						
	Highland						
	Moray						
	Orkney Islands						
	Perth & Kinross						
	Scottish Borders						
	Shetland Islands						
	South Ayrshire						
	Stirling						
URBAN	Better	9	10	12	9	6	6
	Worse	9	8	6	9	12	12
RURAL	Better	7	8	5	7	6	8
	Worse	7	6	9	7	8	6
BOTH	Better	16	18	17	16	12	14
	Worse	16	14	15	16	20	18



Better



Worse

Effects on the minimum adult adjustments

Another adjustment that occurs at the end of the household projection process is the minimum adult adjustment. In this adjustment the minimum number of adults required to fill the projected number of household is compared to the number of adults in the population projections. If there are not enough adults to fill the households, the households in each type are adjusted by converting larger household to smaller households (the total number of households does not change).

Table 3 summarises the minimum adult adjustments that were required for each projection. Adjustments were required for two Local Authorities, Dundee City and Eilean Siar, in all projections, but the effects of the different projections varied. For Dundee City it is clear that both Scottish Household Survey (SHS)-adjusted projections performed worse than the principal projection, as the scale of the adjustments required is larger and these adjustments are required in more years. For Dundee City the AUR projection performs slightly worse than the AS. For Eilean Siar, the AUR projection performed very similarly to the principal projection and the AS projection slightly worse.

Table 3: Minimum adult adjustments required

	Dundee City			Eilean Siar		
	Principal	AS	AUR	Principal	AS	AUR
Adjustment Years	2033-2035	2026-2035	2025-2035	2030-2035	2026-2035	2029-2035
Adjustment in Final Year (Persons)	410	1830	1940	240	290	220

4.4 Conclusion

Adjusting the household projections to survey proportions at both the Scotland level and at the urban-rural level decreases the overall household projections for all local authorities. At this stage there is little to distinguish the two different levels of survey-adjusted projections. However, the adjustments described above are for a single year and are, therefore, relatively small. If the trends in the household proportions from the SHS data are incorporated and the adjustment sizes increase it may be possible that greater differences between the two levels of adjusted projections emerge. For this reason I will continue to investigate both levels of adjustment as I investigate the incorporation of trends in household proportions into the projections.

5. Using trends in survey data

The methodology used up to this point incorporates differences between the survey proportions and the projected proportions in the base year of the projection, and adjusts for this difference in all future years. This shifts the projection proportions down by the base year differences in all years, but it does not make any use of the trend information in the Scottish Household Survey (SHS) data, which suggests that the slowing of the increase in the proportions of smaller households and the slowing of the decrease in the proportion of larger households will continue. A methodology that projects the survey trends in the proportion of households of different types for future years and then incorporates this into the projection may produce improved projections.

This section investigates trend projections for the survey data, for Scotland and urban and rural areas. It will then go on to incorporate the projected trends into the adjusted household projections.

5.1 Projecting the trend in household proportions forward from survey data

The first stage in developing a revised household projection system is to develop a methodology that projects the household proportions from survey data. This initial investigation considers projecting the household proportions in two ways:

- using the same modified two-point exponential equation used to project headship rates;
- using linear regression.

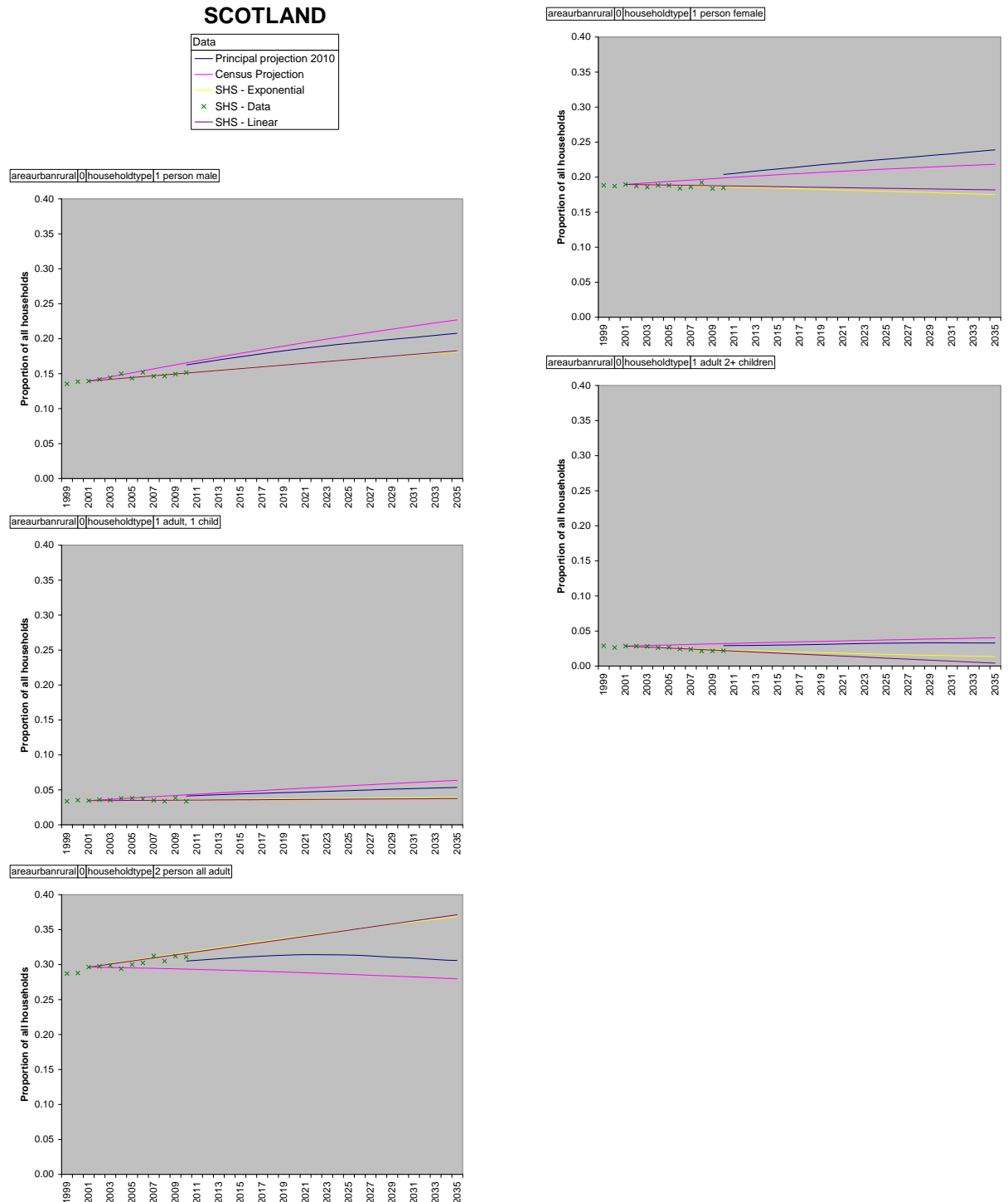
There are advantages to each method. The exponential method ensures that the projected proportions will always be between zero and one and incorporates an element of flattening off of the change, but can only be based on two time points. This means that the choice of times points could unduly affect the projection obtained, due to year-on-year variability in the SHS sample. The linear method incorporates all time points for which we have data, meaning that it is less affected by year-on-year variation, but if projected too far will project values that are impossible in the real world (below zero or above one). There are methods to incorporate more data points into an exponential projection, however these complex methods have proved difficult to program in the past, and are not, therefore, suitable for this preliminary investigation.

Figure 9 presents projections of the household proportions using both these methodologies and, for comparison, the proportions derived from the 2010-based principal projection and a proportion projection using the exponential method to project household proportions using census data (1991 and 2001). The census-based projection is not used in the household projections and is presented for comparison only. The SHS-based projections are carried out on the raw SHS data and subsequently adjusted to census data at 2001. The sum of all the household types for each projection method has been constrained to one. It can be seen from these graphs that projections at Scotland level, based on the SHS data, show smaller proportions of households containing only one adult, with or without children and greater proportions of multi-adult households, with or without children. The same pattern occurs within the urban and rural area projections on the following pages.

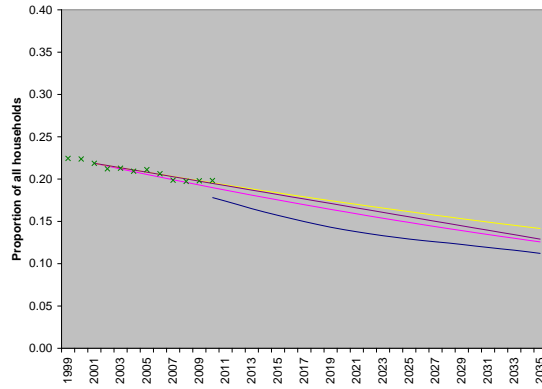
In most cases the linear and exponential-based SHS projection of household proportions are similar. The only projection that is of particular concern is that for 'one adult, 2+ children' where the SHS based-projections take the proportion of all households from just above 2% to near 1% in 2035 (0.4% and 1.3% for the exponential and linear projections respectively for Scotland). By projecting data from only 10 years forward 25 years we are assuming that the trends from a relatively short time period will continue for a long time, and this might not be realistic, hence the very low figures for this household type. One way to deal with this would be to only assume that the trend will continue forward for a limited period, say for five or 10 years, allowing the trend to revert to that of the principal projection after that. These limited adjustments will be seen later in this paper when the projected survey proportions are incorporated into the projections.

In the first instance I will investigate adjusting the projections using the linear projection, as it is less subject to the variability between SHS data points. I will investigate the adjustments at the Scotland and Urban/Rural levels and adjustments incorporating different numbers of years of projected SHS proportions (1, 2, 5, 10, 25).

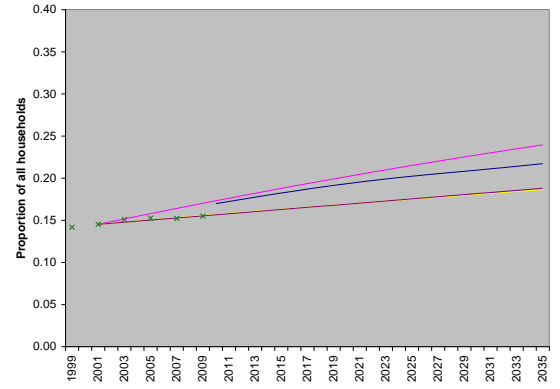
Figure 8: Projecting the household proportions for urban areas, rural areas and Scotland



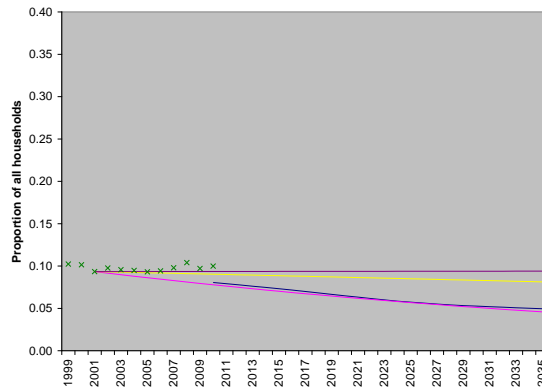
[areaurbanrural]0[householdtype]2+ adult 1+ children



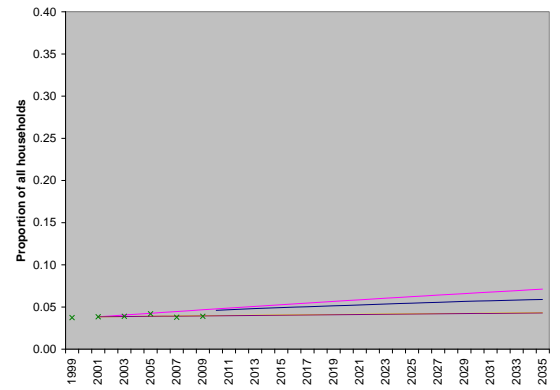
[areaurbanrural]1[householdtype]1 person male



[areaurbanrural]0[householdtype]3+ person all adult



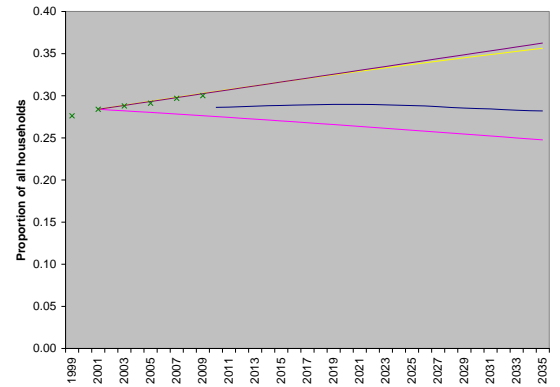
[areaurbanrural]1[householdtype]1 adult, 1 child



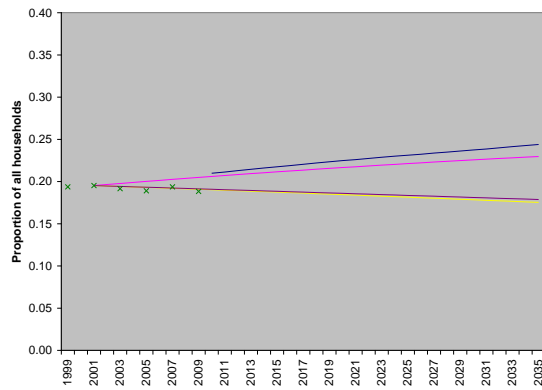
URBAN

Data
Principal projection 2010
Census Projection
SHS - Exponential
SHS - Data
SHS - Linear

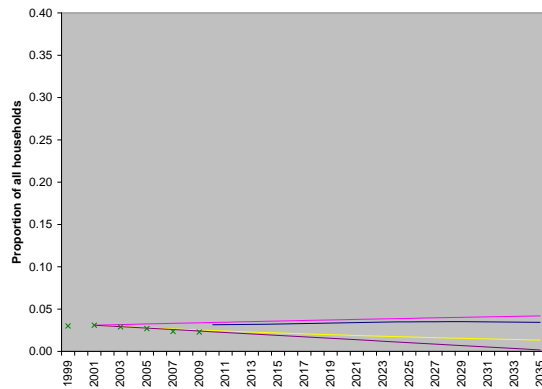
[areaurbanrural]1[householdtype]2 person all adult



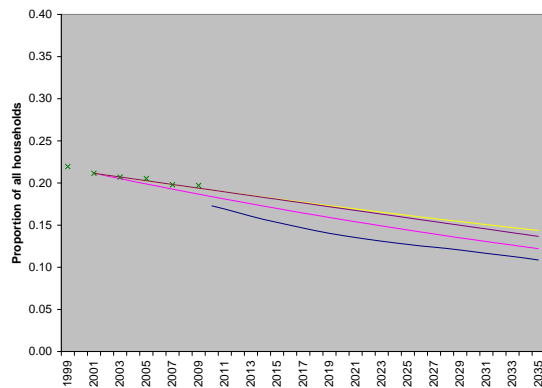
areaurbanrural|1|householdtype|1 person female



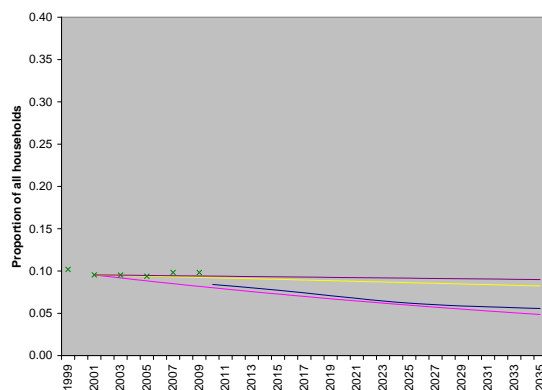
areaurbanrural|1|householdtype|1 adult 2+ children



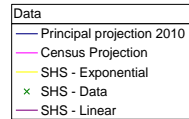
areaurbanrural|1|householdtype|2+ adult 1+ children



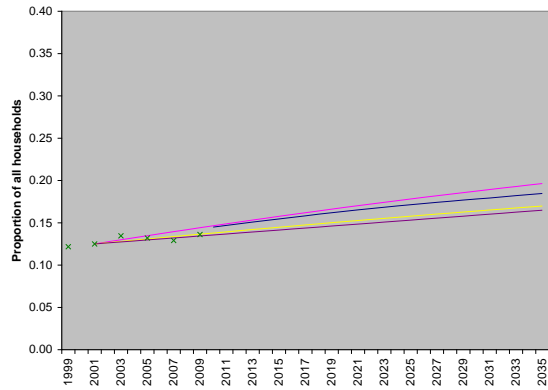
areaurbanrural|1|householdtype|3+ person all adult



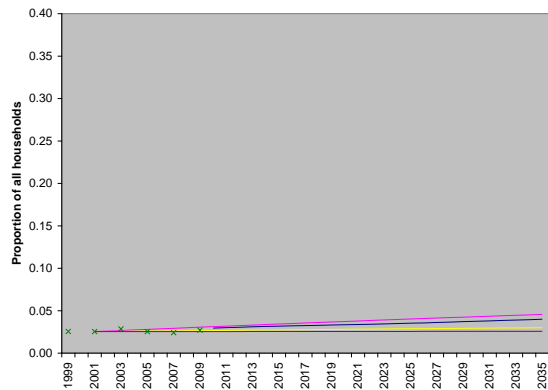
RURAL



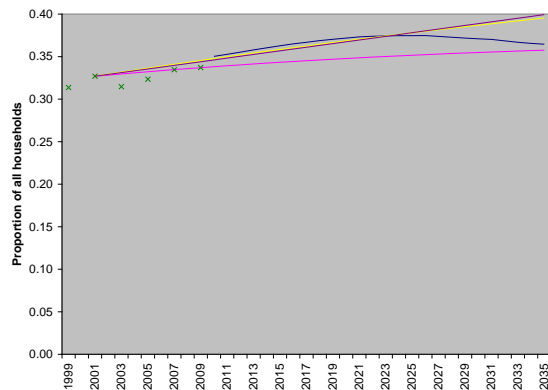
areaurbanrural|2|householdtype|1 person male



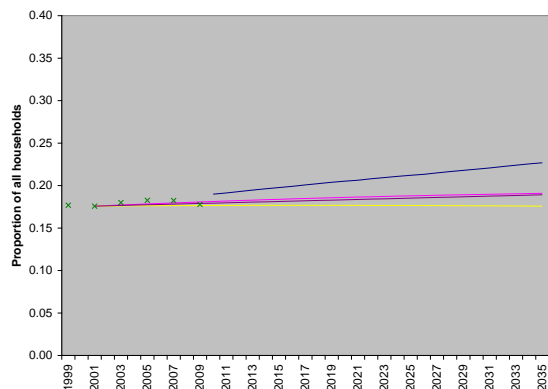
areaurbanrural|2|householdtype|1 adult, 1 child



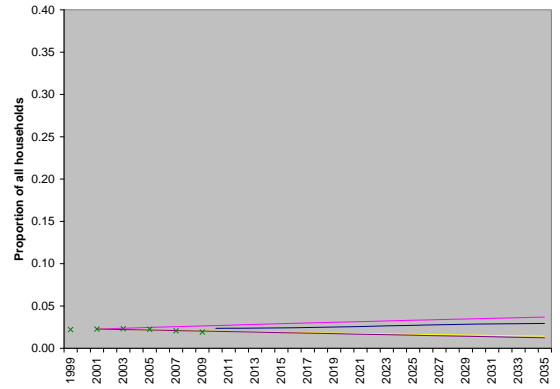
areaurbanrural|2|householdtype|2 person all adult



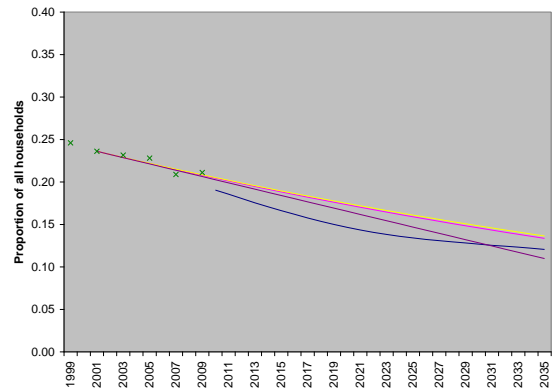
areaurbanrural|2|householdtype|1 person female



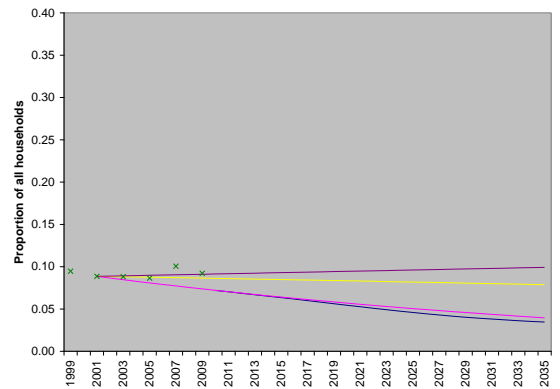
areaurbanrural|2|householdtype|1 adult 2+ children



areaurbanrural|2|householdtype|2+ adult 1+ children



areaurbanrural|2|householdtype|3+ person all adult



5.2 Incorporating projected Scottish Household Survey (SHS) data into the 2010-based household projections

The methodology used to incorporate survey trends into the adjusted projections is based upon the methodology already described. However, once the adjustment to the survey data has been run for the base year the program then returns to compare the proportions in the newly adjusted raw projection for the next year (e.g. 2011) and repeats the adjustments to future years based on this year. This cycle is continued until the adjustments have been performed for the last year required. The adjusted projection then re-enters the principal projection system for the final stages. A diagram of this process can be seen at [Annex A](#).

A series of household projections incorporating the projected survey data have been run. The survey data has been projected on a linear basis, and adjustments performed at either a Scotland ('Linear Scotland' - LS) or Urban/Rural ('Linear Urban/Rural' - LUR) level. Adjustments have been made for either one year only, the first two, five or ten years or for all years in the projection (25 years). The projections adjusted for one year only are equivalent to the projection described at section 4.3, however they use the predicted value for 2010 from the linear regression, rather than the actual SHS data from 2009/10.

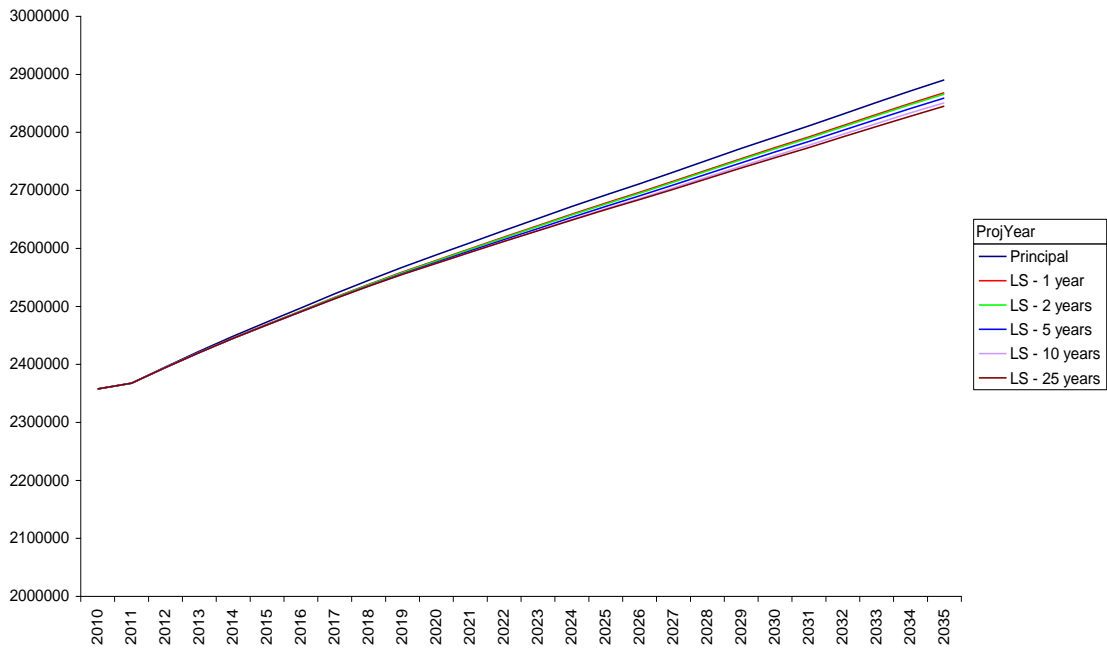
Effects on household numbers

This section discusses the full household projections, adjusted for varying numbers of years, with the adjustments are performed either at Scotland (LS) or urban-rural (LUR) levels.

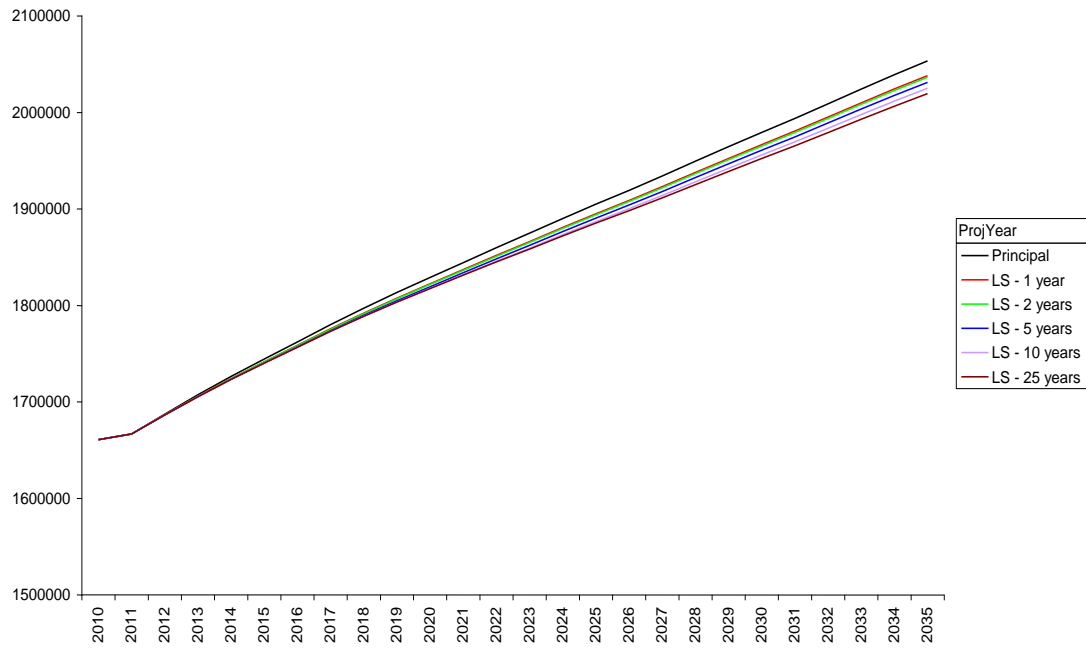
Household numbers for Scotland, urban and rural areas

[Figure 10](#) and [Figure 11](#) show the household projections for Scotland and the urban and rural areas for the LS and LUR projections, respectively. In all the adjusted projections decreases in total household number, relative to the principal projection, are seen. The greatest changes occur between the principal projection and the first year of adjustment. This may be expected as it is in this year that the background differences between the principal projection and the SHS proportions in the base year is adjusted for. Adjustments for additional years only adjust for the differences between the rate of change between the survey trends and the principal projection and therefore do not contain such abrupt changes in household proportions. [Table 4](#) summarises the differences between these projections at 2035. It shows that in all cases the overall effect of adjusting the household projections to survey data on total household numbers is small, regardless of whether or not the trend in the survey data is incorporated and whether the adjustments are done at the Scotland or urban-rural level. The largest percentage decrease in household numbers seen is only 2.0%, in the rural area, when the LUR adjustments are applied to all 25 years. When the projections are adjusted at the Scotland level, the urban adjustment is more than the all-Scotland adjustment and the rural adjustment less, but when the projections are adjusted at the urban-rural level the reverse is true.

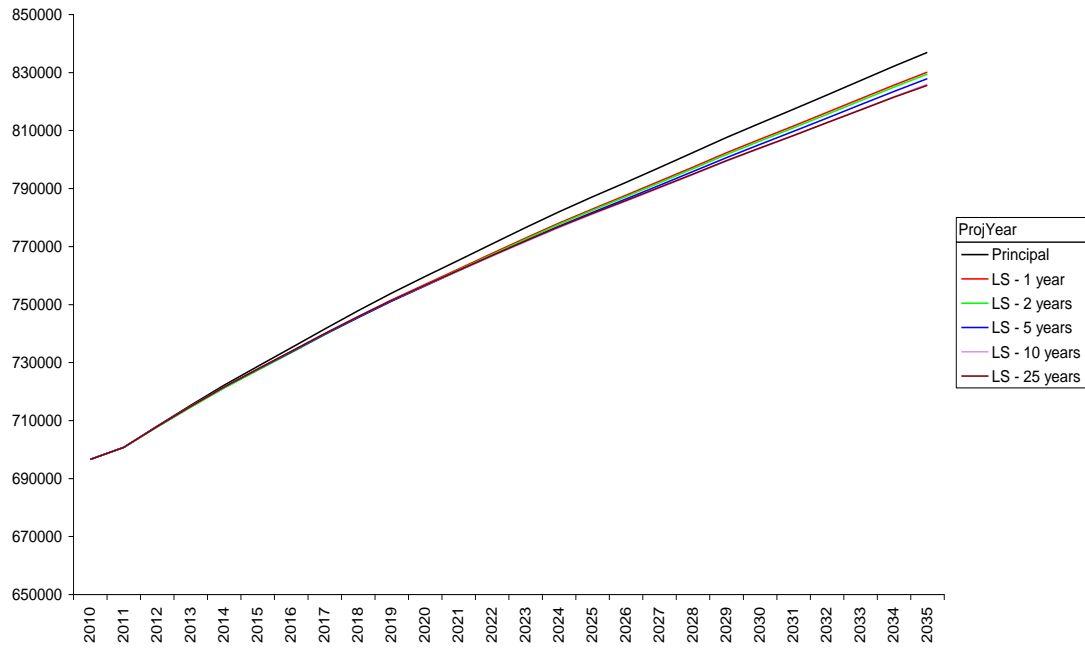
Figure 9: Scotland-adjusted 2010-based household projections
SCOTLAND



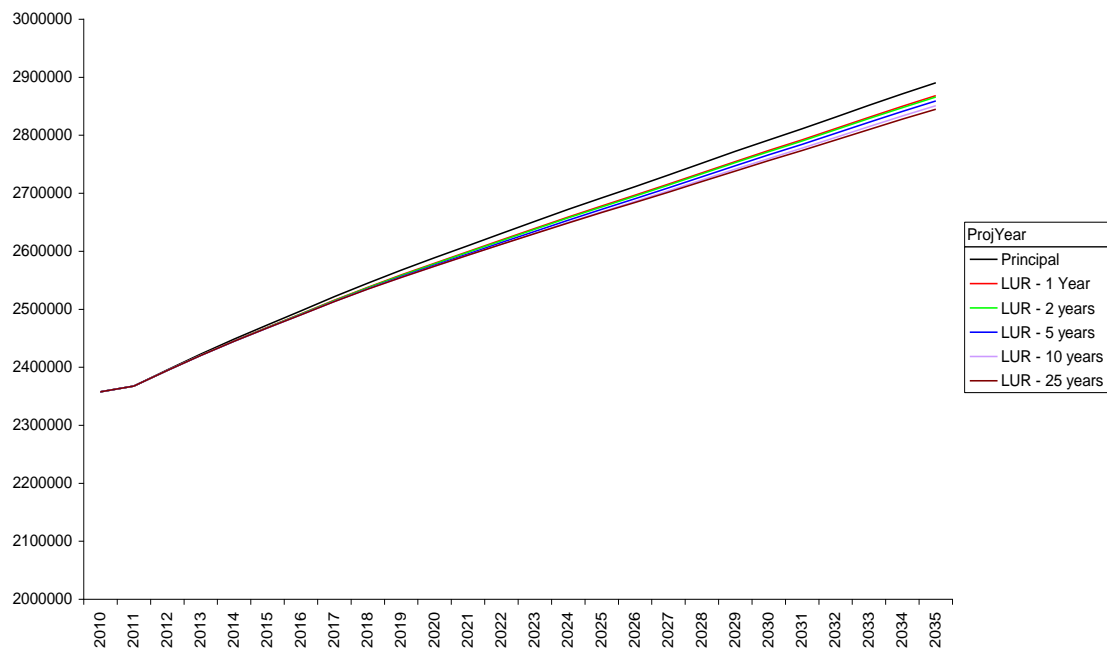
URBAN



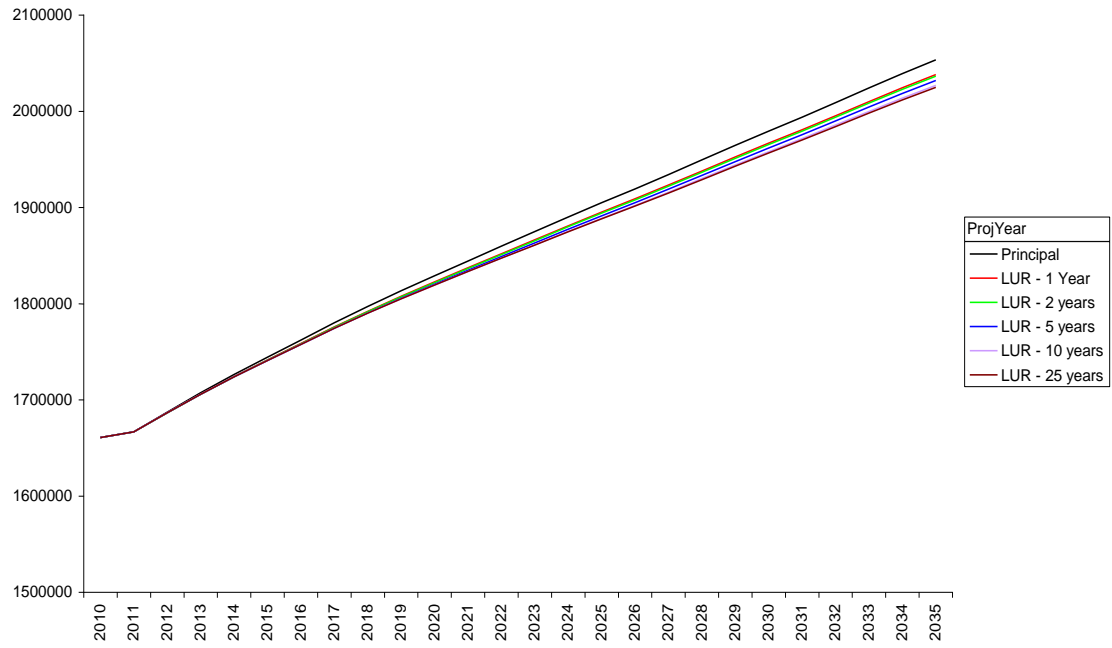
RURAL



**Figure 10: Urban-rural adjusted 2010-based household projections
SCOTLAND**



URBAN



RURAL

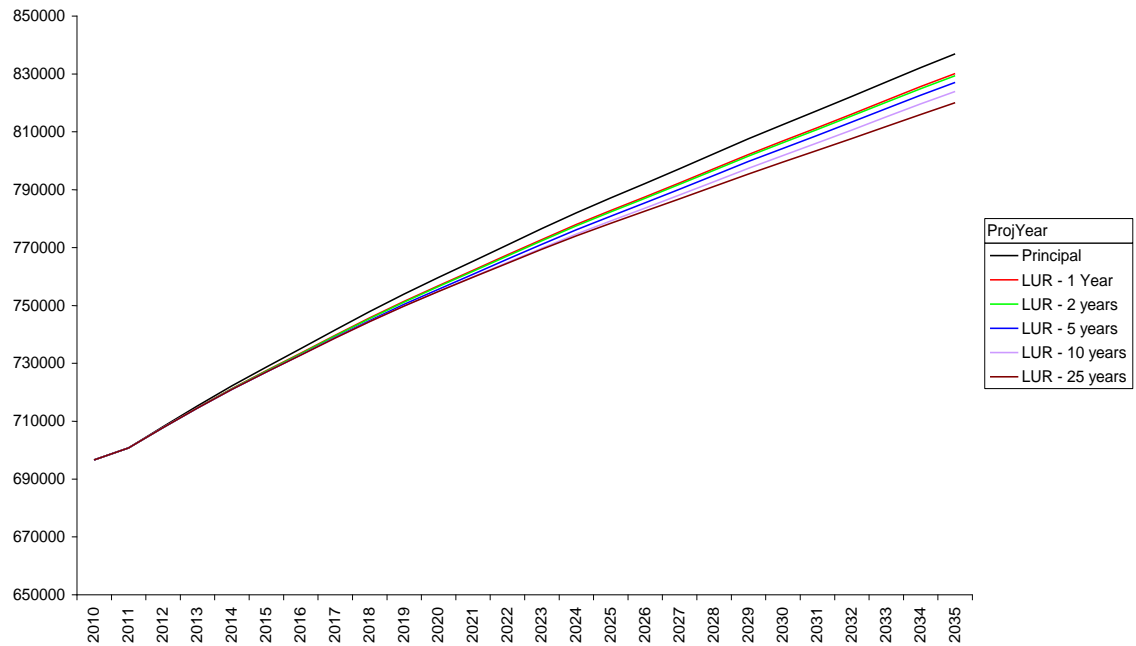


Table 4: Comparison of projected household numbers for different trend adjusted household projections in 2035

Projection		Scotland		Area Urban		Rural	
Principal projection		2,890,381	100.0%	2,053,473	100.0%	836,908	100.0%
Scotland-adjusted	Adjusted for: 1 year	2,868,276	99.2%	2,038,128	99.3%	830,149	99.2%
	2 years	2,865,896	99.2%	2,036,485	99.2%	829,411	99.1%
	5 years	2,859,077	98.9%	2,031,205	98.9%	827,872	98.9%
	10 years	2,850,950	98.6%	2,025,015	98.6%	825,936	98.7%
	25 years	2,844,975	98.4%	2,019,410	98.3%	825,565	98.6%
Urban/Rural-adjusted	Adjusted for: 1 year	2,868,227	99.2%	2,038,095	99.3%	830,132	99.2%
	2 years	2,865,843	99.2%	2,036,455	99.2%	829,388	99.1%
	5 years	2,859,006	98.9%	2,031,926	99.0%	827,080	98.8%
	10 years	2,850,851	98.6%	2,026,915	98.7%	823,936	98.5%
	25 years	2,844,805	98.4%	2,024,754	98.6%	820,050	98.0%

As incorporating additional years of the survey proportion projection into the household projections only has small effects on the overall projections, the subsequent analysis only presents adjustments for one, ten and 25 years.

Household numbers by area (Scotland, urban, rural) and household type

Generally, the changes that are seen in individual household types are larger than the changes that are seen in the overall household numbers. [Figure 12](#) shows, for each household type, the difference between the principal projection and the 1-year, 10-year and 25-year adjusted projections for both Linear Scotland (LS) and Linear Urban/Rural (LUR). As with the adjustments described at section 4, both the projections produce lower household numbers for all areas in all household types containing only one adult. Increasing the number of years in which the adjustments are applied gives larger decreases in these household types, relative to the principal projection, although whether the LS or LUR adjustments have greater effect varies. Both LS and LUR give increased household numbers in all areas for households containing 3 or more adults, as described in section 4, again with greater differences as the projections are adjusted at more years.

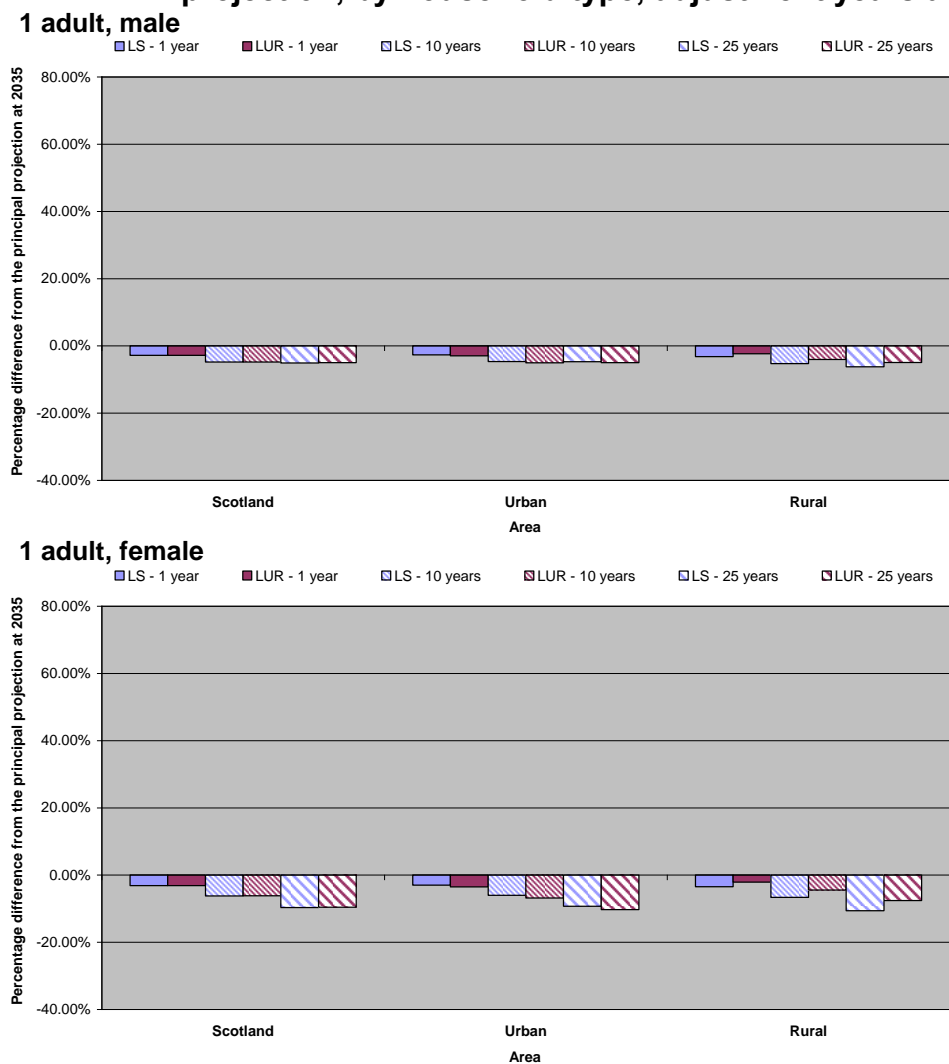
In 2 person all adult, and 2+ adult 1+ children households the picture is different. For 2 person all adult households in Scotland overall, and for urban areas, both adjustment methods produce increases in household numbers, as would be expected from section 4, with additional adjustment years increasing the effect, but in rural areas, while LS behaves in the same manner, LUR gives small decreases relative to the principal projection when adjusted for 1 or 10 years, and a small increase when adjusted for 25 years. In 2+ adult 1+ children households, for 1 and 10 years of adjustments, both LS and LUR increase the household numbers relative to the principal projection, with the 10 year adjustment projections having an increased effect, but when the projections are adjusted for all 25 years the effects are smaller than the 10-year adjustments, with the urban-rural adjustments to the rural area actually decreasing the number of household relative to the principal projection. These changes reflect the differences in the proportion projections ([Figure 9](#)) where for rural areas the principal projection and the linear projections intersect.

It is notable that by far the largest differences from the main projections are seen in households consisting of one adult living with two or more children

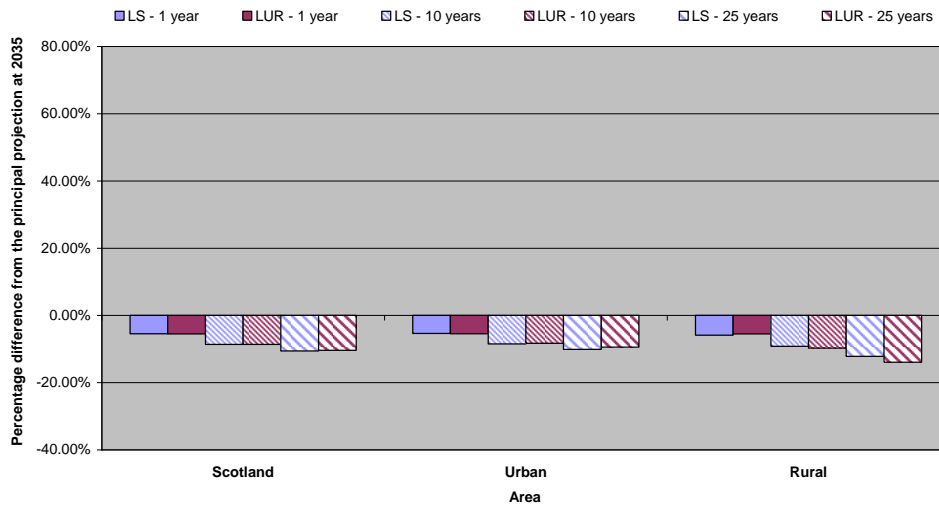
(which show much lower figures than the principle projections), and for households with three or more adults (which show much higher figures). These are the two smallest households types, so the numbers of households of this type included in the SHS will be small, and the figures are therefore likely to fluctuate more. This would suggest the projections based on these figures would be less reliable.

Tables of household numbers for all projections at 2035 can be found at [annex C](#).

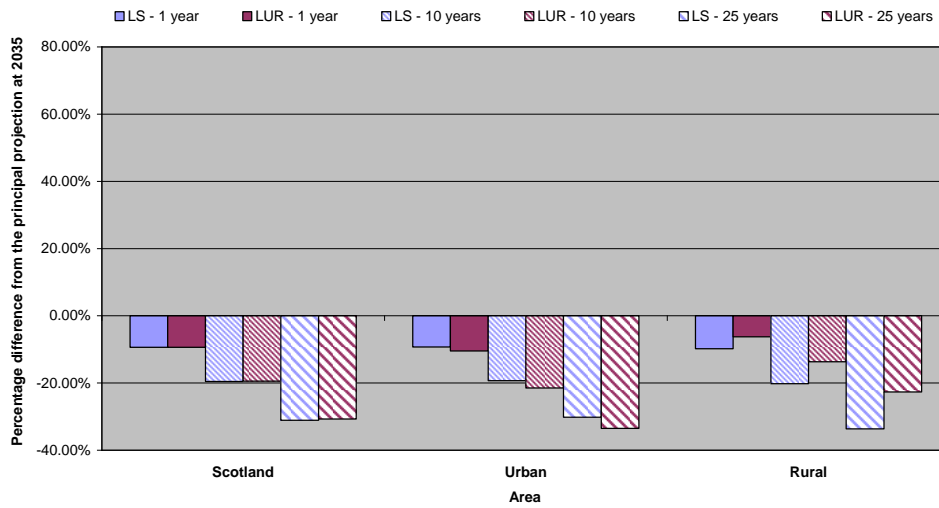
Figure 11: Comparison between adjusted projection and the principal projection, by household type, adjustment years and area



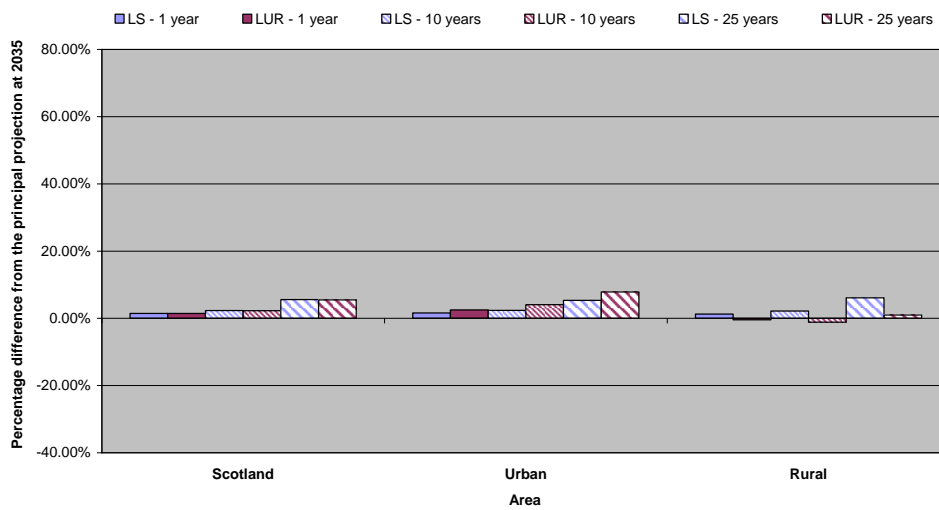
1 adult, 1 child



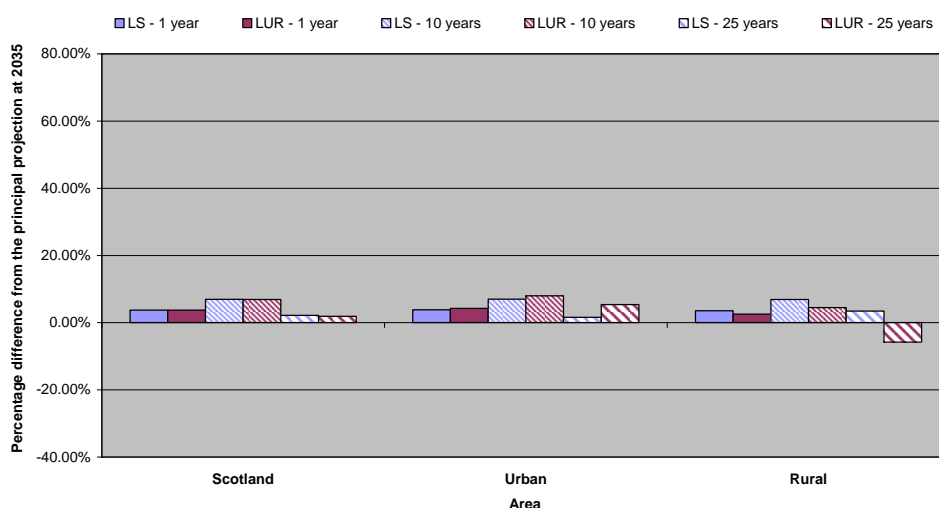
1 adult, 2+ children



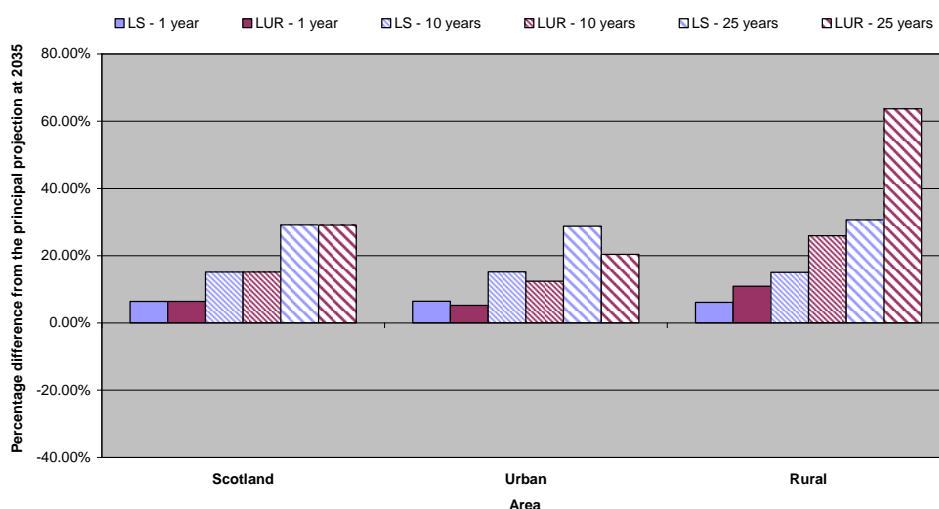
2 person, all adult



2+ adults, 1+ children



3+ adults



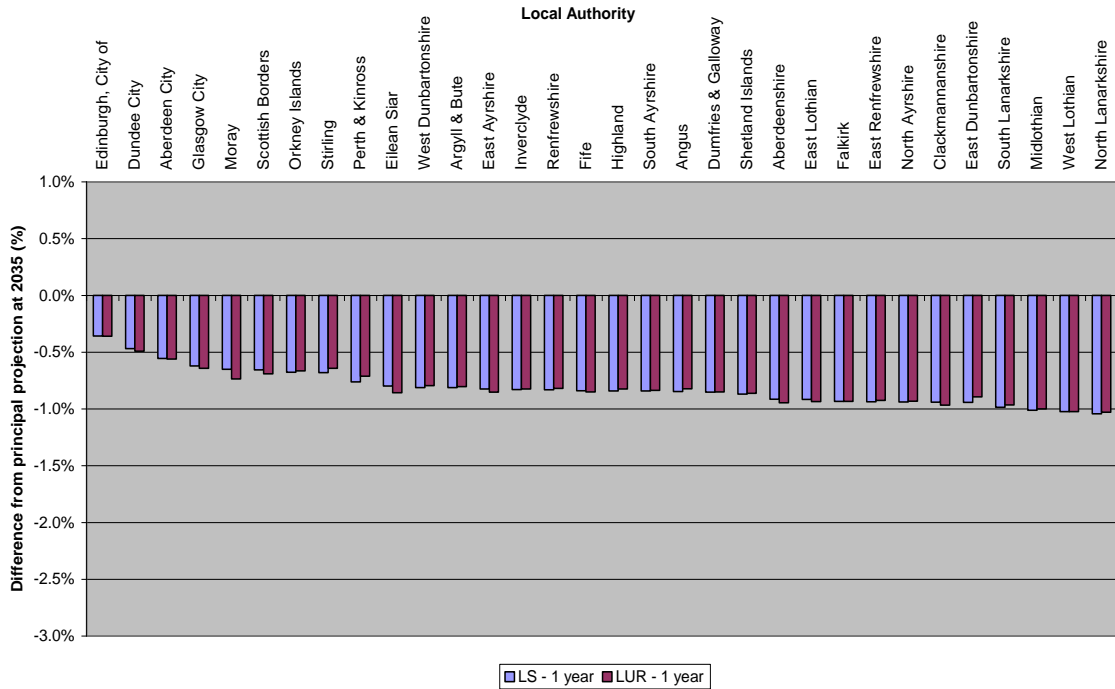
Household numbers for local authorities

The changes that are seen for individual local authorities also tend to be greater than the changes that are seen in the household numbers for larger areas. This is summarised in figure 13 which shows the difference between the principal projection and the 1-year, 10-year and 25-year adjusted projections for both Scotland and urban-rural adjusted projections at 2035. Household numbers for each local authority at 2035 can be found at [annex C](#) (table C-2).

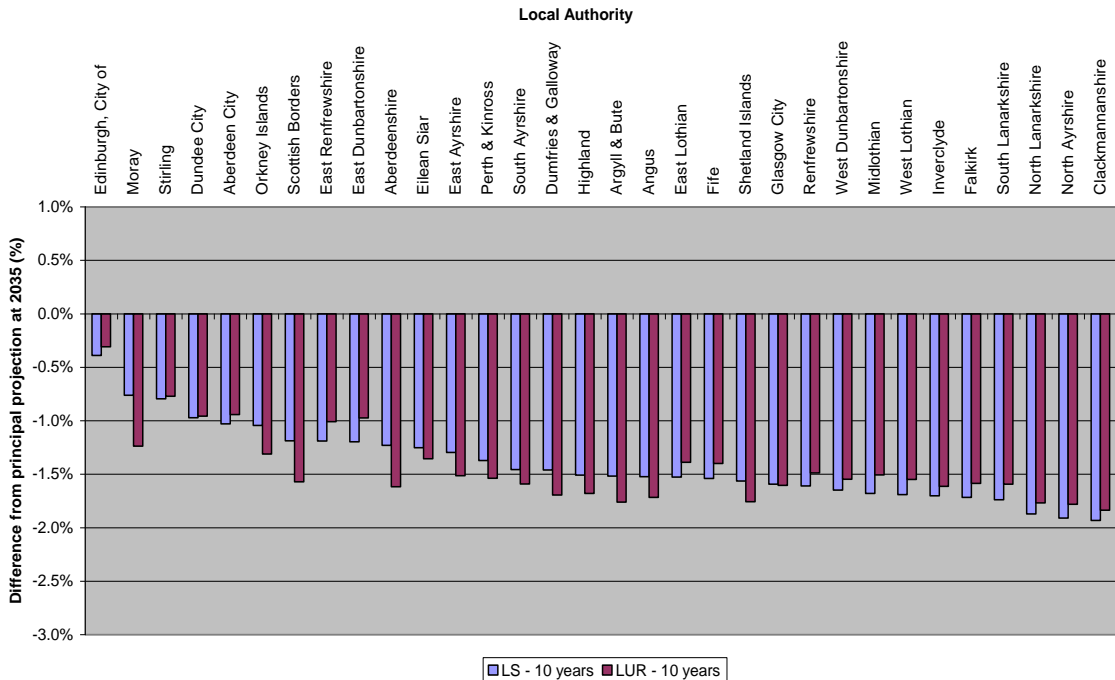
These graphs show that while generally adjusting the projections to survey data decreases total household numbers and increasing the years of adjustments causes further decreases, compared to the principal projections, this is not always the case, particularly at 25 years, where in two local authorities 25 years of adjustments actually increases household numbers. The differences between the Scotland-level adjustments and the urban/rural adjustments also increase as more years of adjustments are introduced into the projections.

Figure 12: Comparison of the household numbers between the SHS adjusted projections and the principal projection at 2035

1 year of adjustment



10 years of adjustments



25 years of adjustments

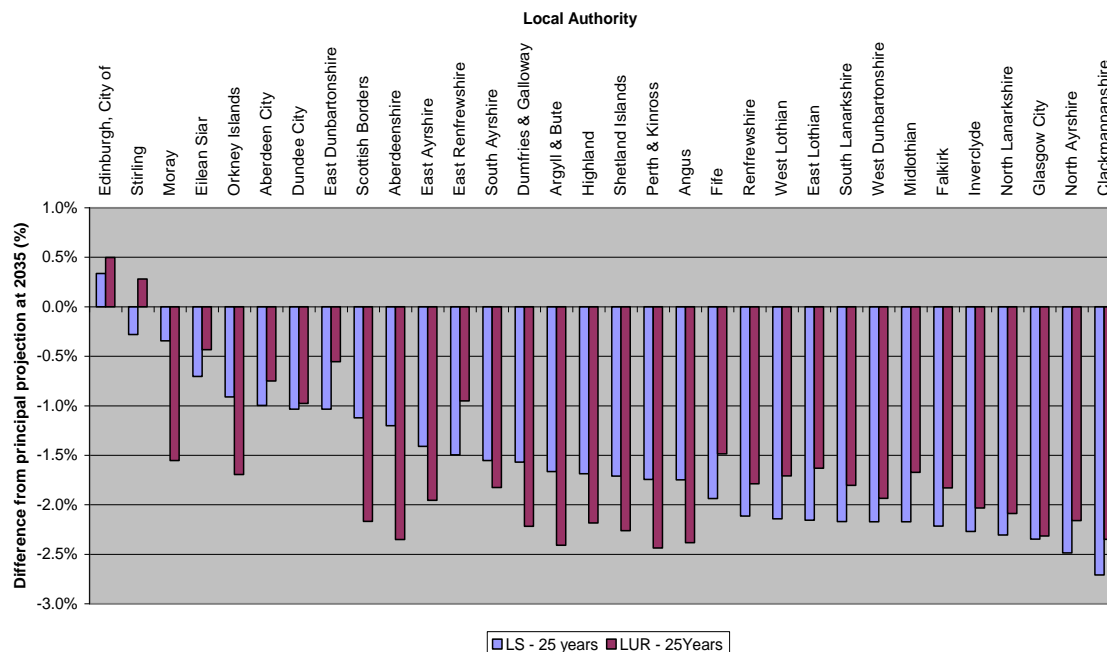


Table 5 summarises the local authority changes for each household type. This table shows that adjusting the projections to the survey data can lead to some quite extreme changes in some household types in some local authorities. The most dramatic example of this is for 3+ adult households, in the urban/rural adjustments over 25 years, where the number of households increases by 67% in one local authority (Scottish Borders), and by an average of 64% when all rural areas are considered together.

Table 5: The range of local authority differences between projections for each household type at 2035

Household Type	Number of years of adjustment Projection	Percentage Difference (compared to the principal projection)									
		1		2		5		10		25	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
All Households	LS	-	-	-	-	-	-	-	-	-	-
	LUR	1.04%	0.36%	1.16%	-0.40%	1.47%	0.46%	1.93%	0.39%	2.71%	0.34%
1 person male	LS	-	-	-	-	-	-	-	-	-	-
	LUR	1.03%	0.36%	1.14%	-0.40%	1.42%	0.43%	1.84%	0.31%	2.44%	0.50%
1 person female	LS	-	-	-	-	-	-	-	-	-	-
	LUR	3.65%	0.83%	4.01%	-0.89%	4.79%	1.23%	5.85%	1.20%	7.14%	1.16%
1 adult, 1 child	LS	-	-	-	-	-	-	-	-	-	-
	LUR	4.05%	0.97%	4.45%	-1.05%	5.30%	1.40%	6.40%	1.37%	7.60%	3.16%
1 adult, 2+ children	LS	-	-	-	-	-	-	-	-	-	-
	LUR	3.94%	1.05%	4.34%	-1.15%	5.46%	1.81%	7.17%	2.40%	11.47%	2.92%
2 person all adult	LS	-	-	-	-	-	-	-	-	-	-
	LUR	4.58%	1.40%	5.06%	-1.53%	6.29%	2.24%	8.16%	2.93%	12.74%	1.02%
2+ adult, 1+ children	LS	-	-	-	-	-	-	-	-	-	-
	LUR	6.38%	1.61%	6.97%	-1.76%	8.27%	1.65%	9.87%	1.38%	13.85%	18.16%
3+ person all adult	LS	-	-	-	-	-	-	-	-	-	-
	LUR	6.60%	1.55%	7.18%	-1.59%	8.37%	1.75%	10.19%	0.88%	16.07%	22.90%
1 adult, 2+ children	LS	-	-	-	-	-	-	-	-	-	-
	LUR	10.31%	3.17%	11.53%	-3.63%	14.95%	5.49%	20.90%	4.12%	35.72%	15.11%
2 person all adult	LS	-	-	-	-	-	-	-	-	-	-
	LUR	11.62%	3.63%	12.98%	-4.32%	16.76%	4.33%	23.24%	3.09%	39.22%	24.74%
2+ adult, 1+ children	LS	-	-	-	-	-	-	-	-	-	-
	LUR	0.24%	2.41%	0.31%	2.63%	0.62%	2.90%	1.51%	3.47%	2.12%	7.71%
3+ person all adult	LS	-	-	-	-	-	-	-	-	-	-
	LUR	0.81%	3.40%	0.92%	3.71%	1.47%	4.27%	2.49%	5.25%	5.17%	10.31%
2+ adult, 1+ children	LS	-	-	-	-	-	-	-	-	-	-
	LUR	0.01%	4.76%	0.02%	5.27%	0.35%	6.75%	1.10%	8.37%	22.32%	5.54%
3+ person all adult	LS	-	-	-	-	-	-	-	-	-	-
	LUR	0.23%	5.32%	0.25%	5.90%	0.72%	7.62%	1.89%	9.59%	38.53%	9.50%
3+ person all adult	LS	-	-	-	-	-	-	-	-	-	-
	LUR	3.31%	7.35%	3.74%	8.21%	5.45%	10.84%	8.98%	16.66%	15.45%	33.62%
3+ person all adult	LS	-	-	-	-	-	-	-	-	-	-
	LUR	2.13%	11.26%	2.42%	12.59%	3.65%	17.04%	6.35%	26.79%	11.35%	66.95%

Effects on the household estimate adjustments

As discussed in [section 4.3](#), examining the household estimate adjustments from each projection can give an indication of whether the adjustments are bringing the projections closer to, or further away from, the real situation (as represented by council tax records). [Table 6](#) shows the comparison of the 2010 and 2011 household estimate adjustments for Linear Scotland (LS) and Linear Urban/Rural (LUR) to those for the principal projection. In this table only the 1 and 10 year adjusted projections are considered as the additional 25 year adjustments only affect years 11 to 25, therefore the household estimate adjustments are the same for these projections as for the 10 year adjustments.

It can be seen that all the adjusted projections perform better than the principal projection in around half of local authorities and worse in the other half. It can also be seen that increasing the number of years of adjustment only affected this assessment for the LS projection in 2011. As in section 4, the LUR projections perform worse than the LS projections in the majority of local authorities.

Table 6: Comparison of the household estimate adjustments for different projections

Projection Year Projection Years of Adjustment		Comparison to the principal projection								Comparison to LS			
		2010				2011				2010		2011	
		LS		LUR		LS		LUR		LUR		LUR	
		1	10	1	10	1	10	1	10	1	10	1	10
SCOTLAND		Same	Same	Same	Same					Same	Same	Same	Same
URBAN	Aberdeen City												
	Clackmannanshire												
	Dundee City												
	East Dunbartonshire												
	East Lothian												
	East Renfrewshire												
	Edinburgh, City of												
	Falkirk												
	Fife												
	Glasgow City												
	Inverclyde												
	Midlothian												
	North Ayrshire												
	North Lanarkshire												
	Renfrewshire												
	South Lanarkshire												
	West Dunbartonshire												
	West Lothian												
RURAL	Aberdeenshire												
	Angus												
	Argyll & Bute												
	Dumfries & Galloway												
	East Ayrshire												
	Eilean Siar												
	Highland												
	Moray												
	Orkney Islands												
	Perth & Kinross												
	Scottish Borders												
	Shetland Islands												
	South Ayrshire												
	Stirling												
URBAN	Better	9	9	9	9	10	11	9	9	5	5	5	5
	Worse	9	9	9	9	8	7	9	9	13	13	13	13
RURAL	Better	8	8	8	8	6	6	7	7	6	6	8	8
	Worse	6	6	6	6	8	8	7	7	8	8	6	6
BOTH	Better	17	17	17	17	16	17	16	16	11	11	13	13
	Worse	15	15	15	15	16	15	16	16	21	21	19	19

Better Worse

Effects on the minimum adult adjustments

Table 7 shows the minimum adult adjustments required in the trend-adjusted projections. Increasing the number of years of adjustments increases the number of local authorities that require minimum adult adjustments from 2 to 6. It also increases both the size of the adjustments needed and the number of years that require adjustments. Whether the adjustments are greater with the Linear Scotland (LS) or Linear Urban/Rural (LUR) adjustments varies. The minimum adult adjustment converts larger households to smaller households, so that fewer adults are required to fill the total number of households, without affecting total household numbers. Therefore, these adjustments act to counter the survey adjustments for individual household types, decreasing the proportions of larger households and increasing the proportions of smaller households, although the decreases in total household numbers in the survey-adjusted projections are retained.

Table 7: Minimum adult adjustments required

Local Authority	Adjustment (Households)	Principal	1 year of adjustment		Projection 10 years of adjustment		25 years of adjustment	
			LS	LUR	LS	LUR	LS	LUR
Aberdeen City	Years affected Adjustment	None	None	None	2032-2035 1340	2031-2035 1860	2027-2035 5540	2026-2035 6130
Dundee City	Years affected Adjustment	2033-2035 410	2027-2035 1690	2026-2035 1770	2018-2035 2980	2017-2035 3140	2018-2035 5730	2017-2035 5680
Edinburgh, City of	Years affected Adjustment	None	None	None	None	None	2029-2035 13550	2029-2036 13790
Eilean Siar	Years affected Adjustment	2030-2035 240	2026-2035 330	2026-2035 280	2019-2035 480	2019-2035 420	2019-2035 980	2019-2035 1160
Orkney Islands	Years affected Adjustment	None	2035 10	None	2032-2035 130	None	2027-2035 400	2031-2035 240
Stirling	Years affected Adjustment	None	None	None	None	None	2029-2035 1490	2027-2035 2900

5.3 Conclusion

These investigations show that incorporating survey trends into the adjustment decreases overall household numbers in almost all cases, with greater effects at local authority level, or by household type, than for total household numbers for Scotland as a whole. The survey adjustments are as likely to worsen, as they are to improve, the proximity to the household estimates for 2010 and 2011 and also increase the minimum adult adjustments required.

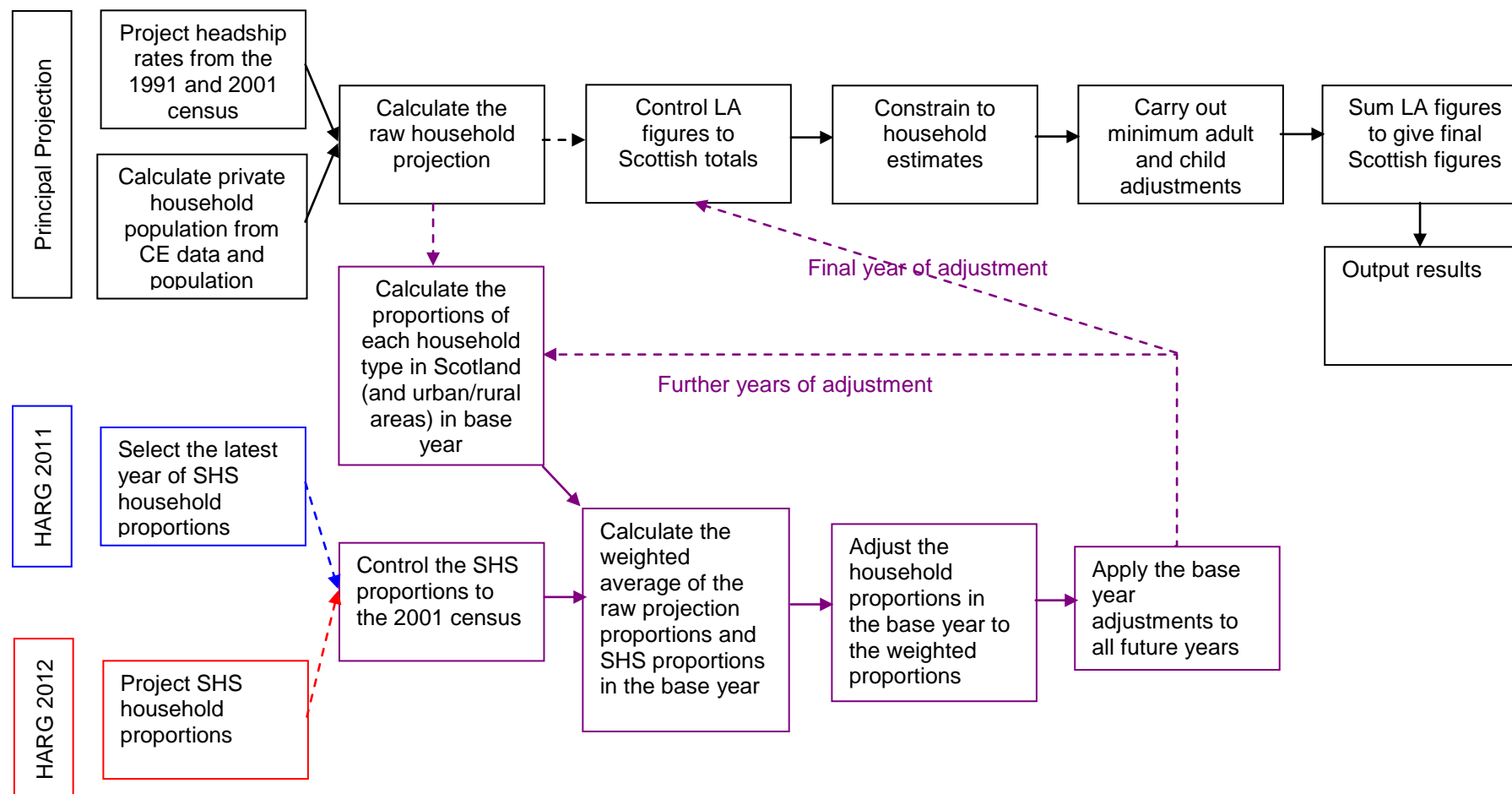
6. Next steps

Household Analysis Review Group (HARG) members are asked to comment on the analysis presented here and consider whether it would be appropriate to publish a survey-adjusted variant of the household projections.

If HARG members wish for a survey adjusted variant to be published:

- Is the weighting strategy used by Office for National Statistics (ONS) suitable for National Records of Scotland (NRS) purposes? This has not been considered in depth to date, but an alternative weighting strategy could be chosen. Increasing the weighting given to the survey data would likely increase the effect of introducing the survey adjustments, but would also increase the likelihood of extreme results for some household types, and increase the likelihood of requiring minimum adult adjustments.
- How many years of adjustment should be applied?
- Should the adjustments be applied at the Scotland or urban/rural level?

7. Annex A: Diagram of processing.



Annex B: Tables of results for section 4 – Incorporating sub-national survey data

Table B-1: Change in household numbers between 2010 and 2035, by local authority and projection

Local Authority	Projection								
	Principal			AS			AUR		
	2010	2035	Change (%)	2010	2035	Change (%)	2010	2035	Change (%)
Scotland	2,357,424	2,890,381	22.6%	2,357,424	2,863,619	21.5%	2,357,424	2,863,592	21.5%
Aberdeen City	103,677	143,686	38.6%	103,677	142,751	37.7%	103,677	142,720	37.7%
Aberdeenshire	103,770	137,272	32.3%	103,770	135,717	30.8%	103,770	135,747	30.8%
Angus	50,568	57,500	13.7%	50,568	56,910	12.5%	50,568	56,956	12.6%
Argyll & Bute	41,609	41,940	0.8%	41,609	41,525	-0.2%	41,609	41,552	-0.1%
Clackmannanshire	22,953	29,398	28.1%	22,953	29,064	26.6%	22,953	29,050	26.6%
Dumfries & Galloway	68,408	71,553	4.6%	68,408	70,812	3.5%	68,408	70,853	3.6%
Dundee City	70,401	81,669	16.0%	70,401	81,233	15.4%	70,401	81,199	15.3%
East Ayrshire	53,722	59,393	10.6%	53,722	58,786	9.4%	53,722	58,803	9.5%
East Dunbartonshire	43,010	44,975	4.6%	43,010	44,444	3.3%	43,010	44,456	3.4%
East Lothian	42,798	59,449	38.9%	42,798	58,822	37.4%	42,798	58,794	37.4%
East Renfrewshire	35,995	39,231	9.0%	35,995	38,787	7.8%	35,995	38,783	7.7%
Edinburgh, City of	220,195	314,767	42.9%	220,195	313,427	42.3%	220,195	313,400	42.3%
Eilean Siar	12,018	12,977	8.0%	12,018	12,838	6.8%	12,018	12,833	6.8%
Falkirk	68,655	84,315	22.8%	68,655	83,355	21.4%	68,655	83,337	21.4%
Fife	161,274	195,481	21.2%	161,274	193,510	20.0%	161,274	193,447	19.9%
Glasgow City	282,196	361,343	28.0%	282,196	358,717	27.1%	282,196	358,575	27.1%
Highland	101,833	128,255	25.9%	101,833	126,924	24.6%	101,833	127,005	24.7%
Inverclyde	36,502	34,317	-6.0%	36,502	33,965	-6.9%	36,502	33,959	-7.0%
Midlothian	35,270	43,645	23.7%	35,270	43,119	22.3%	35,270	43,112	22.2%
Moray	39,207	45,486	16.0%	39,207	45,105	15.0%	39,207	45,083	15.0%
North Ayrshire	62,006	65,709	6.0%	62,006	64,955	4.8%	62,006	64,946	4.7%
North Lanarkshire	144,865	167,131	15.4%	144,865	164,982	13.9%	144,865	164,965	13.9%
Orkney Islands	9,308	11,505	23.6%	9,308	11,406	22.5%	9,308	11,411	22.6%
Perth & Kinross	64,780	92,543	42.9%	64,780	91,720	41.6%	64,780	91,826	41.8%
Renfrewshire	79,054	86,840	9.8%	79,054	85,957	8.7%	79,054	85,950	8.7%
Scottish Borders	51,983	62,006	19.3%	51,983	61,486	18.3%	51,983	61,482	18.3%
Shetland Islands	9,829	11,937	21.4%	9,829	11,804	20.1%	9,829	11,808	20.1%
South Ayrshire	51,526	55,089	6.9%	51,526	54,525	5.8%	51,526	54,559	5.9%
South Lanarkshire	137,228	162,979	18.8%	137,228	161,012	17.3%	137,228	161,005	17.3%
Stirling	38,048	49,451	30.0%	38,048	49,045	28.9%	38,048	49,087	29.0%
W. Dunbartonshire	41,578	43,242	4.0%	41,578	42,809	3.0%	41,578	42,807	3.0%
West Lothian	73,158	95,294	30.3%	73,158	94,107	28.6%	73,158	94,085	28.6%

Table B-2: Household numbers in 2035, by household type, local authority and projection

Local Authority	Projection	Household Type							All Households
		1 adult 2+ children	1 adult, 1 child	1 person female	1 person male	2 person all adult	2+ adult 1+ children	3+ person all adult	
Scotland	Principal	94,847	154,211	690,533	600,300	883,941	323,604	142,943	2,890,381
	AS	85,494	145,922	665,744	581,373	890,773	340,260	154,052	2,863,619
	AUR	85,501	145,916	665,797	581,406	890,702	340,239	154,031	2,863,592
Aberdeen City	Principal	3,758	5,626	31,774	37,954	40,455	15,547	8,575	143,686
	AS	3,385	5,322	30,673	36,785	40,902	16,412	9,272	142,751
	AUR	3,347	5,282	30,504	36,624	41,305	16,459	9,198	142,720
Aberdeenshire	Principal	3,830	4,903	28,459	22,459	52,503	20,882	4,235	137,272
	AS	3,417	4,593	27,208	21,558	52,572	21,832	4,535	135,717
	AUR	3,533	4,721	27,651	21,860	51,582	21,714	4,686	135,747
Angus	Principal	2,022	2,625	12,810	11,466	20,587	6,256	1,733	57,500
	AS	1,816	2,476	12,331	11,080	20,754	6,585	1,869	56,910
	AUR	1,874	2,540	12,517	11,218	20,337	6,540	1,929	56,956
Argyll & Bute	Principal	1,229	1,865	9,564	8,719	15,433	4,008	1,121	41,940
	AS	1,105	1,761	9,216	8,435	15,574	4,223	1,210	41,525
	AUR	1,141	1,808	9,354	8,541	15,265	4,195	1,248	41,552
Clackmannanshire	Principal	1,415	1,710	7,344	5,988	9,059	2,980	901	29,398
	AS	1,275	1,618	7,089	5,803	9,159	3,146	974	29,064
	AUR	1,259	1,604	7,043	5,773	9,253	3,154	963	29,050
Dumfries & Galloway	Principal	2,142	2,818	17,603	12,423	26,613	7,706	2,247	71,553
	AS	1,922	2,655	16,925	11,992	26,798	8,102	2,419	70,812
	AUR	1,985	2,725	17,182	12,145	26,269	8,049	2,497	70,853
Dundee City	Principal	3,097	5,146	19,114	19,864	19,616	8,377	6,454	81,669
	AS	3,009	5,089	18,868	19,670	19,406	8,456	6,735	81,233
	AUR	2,995	5,071	18,804	19,626	19,574	8,457	6,671	81,199
East Ayrshire	Principal	1,950	3,045	13,005	10,865	20,235	7,799	2,494	59,393
	AS	1,747	2,865	12,486	10,473	20,346	8,187	2,682	58,786
	AUR	1,802	2,938	12,664	10,594	19,918	8,124	2,764	58,803
East Dunbartonshire	Principal	1,216	1,775	10,851	6,325	16,039	6,472	2,298	44,975
	AS	1,084	1,662	10,366	6,066	16,047	6,761	2,459	44,444
	AUR	1,071	1,647	10,291	6,031	16,211	6,774	2,430	44,456
East Lothian	Principal	2,631	3,397	13,537	10,171	18,348	9,220	2,146	59,449
	AS	2,358	3,198	13,004	9,810	18,459	9,685	2,309	58,822
	AUR	2,328	3,170	12,913	9,754	18,640	9,705	2,283	58,794
East Renfrewshire	Principal	1,216	1,765	10,048	4,625	12,502	7,260	1,814	39,231
	AS	1,083	1,652	9,594	4,434	12,503	7,580	1,940	38,787
	AUR	1,070	1,638	9,524	4,409	12,629	7,595	1,918	38,783
Edinburgh, City of	Principal	6,962	12,003	70,496	70,526	89,286	35,597	29,896	314,767
	AS	6,256	11,326	67,885	68,184	90,047	37,485	32,245	313,427

Local Authority	Projection	Household Type							All Households
		1 adult 2+ children	1 adult, 1 child	1 person female	1 person male	2 person all adult	2+ adult 1+ children	3+ person all adult	
	AUR	6,187	11,248	67,514	67,881	90,948	37,589	32,032	313,400
Eilean Siar	Principal	292	368	3,372	2,735	4,672	826	711	12,977
	AS	274	357	3,254	2,652	4,689	855	758	12,838
	AUR	271	354	3,276	2,660	4,611	868	792	12,833
Falkirk	Principal	3,064	5,018	20,759	16,876	26,155	9,349	3,095	84,315
	AS	2,753	4,735	19,990	16,315	26,378	9,844	3,338	83,355
	AUR	2,721	4,697	19,863	16,234	26,649	9,871	3,302	83,337
Fife	Principal	7,009	11,694	47,160	36,903	62,772	22,476	7,468	195,481
	AS	6,300	11,037	45,427	35,688	63,326	23,675	8,057	193,510
	AUR	6,224	10,945	45,116	35,498	63,955	23,729	7,979	193,447
Glasgow City	Principal	12,038	29,947	97,258	98,884	70,975	30,364	21,877	361,343
	AS	10,915	28,515	94,508	96,471	72,231	32,266	23,810	358,717
	AUR	10,810	28,346	94,132	96,180	73,045	32,402	23,660	358,575
Highland	Principal	3,975	5,268	31,084	24,965	45,543	13,223	4,197	128,255
	AS	3,569	4,968	29,916	24,123	45,906	13,917	4,525	126,924
	AUR	3,684	5,097	30,359	24,419	44,961	13,816	4,669	127,005
Inverclyde	Principal	1,143	1,851	9,136	7,928	9,527	3,294	1,439	34,317
	AS	1,030	1,751	8,824	7,687	9,637	3,479	1,557	33,965
	AUR	1,019	1,738	8,773	7,654	9,745	3,490	1,541	33,959
Midlothian	Principal	2,238	2,606	9,864	6,684	14,610	5,919	1,723	43,645
	AS	2,004	2,451	9,469	6,442	14,687	6,213	1,852	43,119
	AUR	1,980	2,431	9,404	6,406	14,833	6,227	1,832	43,112
Moray	Principal	400	799	9,822	8,324	18,019	6,657	1,466	45,486
	AS	357	749	9,400	7,998	18,061	6,968	1,571	45,105
	AUR	369	770	9,555	8,112	17,722	6,932	1,624	45,083
North Ayrshire	Principal	2,968	4,154	16,890	12,453	21,313	5,624	2,307	65,709
	AS	2,674	3,930	16,304	12,069	21,548	5,937	2,494	64,955
	AUR	2,642	3,898	16,200	12,009	21,777	5,953	2,467	64,946
North Lanarkshire	Principal	7,105	10,936	41,300	33,458	50,019	16,262	8,051	167,131
	AS	6,381	10,313	39,748	32,329	50,417	17,115	8,679	164,982
	AUR	6,308	10,235	39,520	32,186	50,959	17,170	8,588	164,965
Orkney Islands	Principal	128	293	2,919	2,152	4,231	1,410	372	11,505
	AS	115	276	2,804	2,075	4,256	1,481	400	11,406
	AUR	118	284	2,848	2,103	4,173	1,472	413	11,411
Perth & Kinross	Principal	3,170	4,128	21,014	18,170	31,178	12,091	2,792	92,543
	AS	2,848	3,895	20,233	17,565	31,439	12,730	3,011	91,720
	AUR	2,941	3,997	20,543	17,788	30,802	12,645	3,109	91,826
Renfrewshire	Principal	3,084	4,781	21,676	18,717	25,623	9,463	3,497	86,840
	AS	2,775	4,518	20,904	18,123	25,880	9,979	3,777	85,957

Local Authority	Projection	Household Type							All Households
		1 adult 2+ children	1 adult, 1 child	1 person female	1 person male	2 person all adult	2+ adult 1+ children	3+ person all adult	
	AUR	2,744	4,483	20,783	18,039	26,157	10,008	3,736	85,950
Scottish Borders	Principal	1,751	1,981	13,499	11,415	25,267	6,666	1,426	62,006
	AS	1,572	1,868	12,992	11,030	25,469	7,016	1,537	61,486
	AUR	1,625	1,920	13,204	11,182	24,984	6,977	1,590	61,482
Shetland Islands	Principal	334	370	3,114	2,273	4,344	1,139	362	11,937
	AS	300	349	2,995	2,195	4,376	1,198	390	11,804
	AUR	309	358	3,039	2,223	4,287	1,190	403	11,808
South Ayrshire	Principal	1,854	2,586	13,190	10,187	19,280	5,724	2,269	55,089
	AS	1,664	2,438	12,690	9,839	19,427	6,022	2,445	54,525
	AUR	1,717	2,500	12,871	9,955	19,019	5,976	2,521	54,559
South Lanarkshire	Principal	6,377	9,558	40,195	31,160	50,870	17,993	6,825	162,979
	AS	5,724	9,009	38,662	30,092	51,246	18,926	7,353	161,012
	AUR	5,658	8,938	38,423	29,945	51,787	18,978	7,275	161,005
Stirling	Principal	1,395	2,274	10,353	8,380	17,150	6,485	3,414	49,451
	AS	1,247	2,136	9,922	8,063	17,215	6,797	3,665	49,045
	AUR	1,287	2,191	10,066	8,158	16,849	6,745	3,792	49,087
West Dunbartonshire	Principal	1,294	3,042	11,102	9,904	11,789	4,192	1,918	43,242
	AS	1,167	2,880	10,725	9,606	11,928	4,429	2,075	42,809
	AUR	1,154	2,859	10,668	9,566	12,061	4,444	2,054	42,807
West Lothian	Principal	3,759	5,877	22,220	17,347	29,927	12,343	3,822	95,294
	AS	3,367	5,529	21,332	16,720	30,091	12,958	4,109	94,107
	AUR	3,327	5,484	21,192	16,633	30,394	12,990	4,065	94,085

Annex C: Tables of results for section 5 – Incorporating the trend projections

Table C-1: Household numbers and difference from the principal projection in 2035, by household type, area and projection

Household Type	Projection			Scotland		Area Urban		Rural	
				Households	Diff.	Households	Diff.	Households	Diff.
All Households	Principal			2,890,381	100.0%	2,053,473	100.0%	836,908	100.0%
	Scotland adjusted	Adjusted for:	1 year	2,868,276	99.2%	2,038,128	99.3%	830,149	99.2%
			2 years	2,865,896	99.2%	2,036,485	99.2%	829,411	99.1%
			5 years	2,859,077	98.9%	2,031,205	98.9%	827,872	98.9%
			10 years	2,850,950	98.6%	2,025,015	98.6%	825,936	98.7%
			25 years	2,844,975	98.4%	2,019,410	98.3%	825,565	98.6%
	Urban-Rural adjusted	Adjusted for:	1 year	2,868,227	99.2%	2,038,095	99.3%	830,132	99.2%
			2 years	2,865,843	99.2%	2,036,455	99.2%	829,388	99.1%
			5 years	2,859,006	98.9%	2,031,926	99.0%	827,080	98.8%
			10 years	2,850,851	98.6%	2,026,915	98.7%	823,936	98.5%
			25 years	2,844,805	98.4%	2,024,754	98.6%	820,050	98.0%
1 person male	Principal			600,300	100.0%	445,766	100.0%	154,534	100.0%
	Scotland adjusted	Adjusted for:	1 year	583,379	97.2%	433,780	97.3%	149,599	96.8%
			2 years	581,708	96.9%	432,594	97.0%	149,115	96.5%
			5 years	577,169	96.1%	429,239	96.3%	147,930	95.7%
			10 years	571,371	95.2%	425,029	95.3%	146,342	94.7%
			25 years	569,660	94.9%	424,718	95.3%	144,941	93.8%
	Urban-Rural adjusted	Adjusted for:	1 year	583,371	97.2%	432,467	97.0%	150,903	97.7%
			2 years	581,699	96.9%	431,131	96.7%	150,568	97.4%
			5 years	577,274	96.2%	427,599	95.9%	149,676	96.9%
			10 years	571,512	95.2%	423,263	95.0%	148,250	95.9%
			25 years	570,264	95.0%	423,390	95.0%	146,874	95.0%
1 person female	Principal			690,533	100.0%	500,724	100.0%	189,810	100.0%
	Scotland adjusted	Adjusted for:	1 year	668,754	96.8%	485,562	97.0%	183,192	96.5%
			2 years	666,488	96.5%	483,977	96.7%	182,510	96.2%
			5 years	658,893	95.4%	478,486	95.6%	180,407	95.0%
			10 years	647,574	93.8%	470,380	93.9%	177,195	93.4%
			25 years	623,733	90.3%	454,138	90.7%	169,594	89.3%
	Urban-Rural adjusted	Adjusted for:	1 year	668,788	96.9%	483,003	96.5%	185,785	97.9%
			2 years	666,525	96.5%	481,156	96.1%	185,369	97.7%
			5 years	659,051	95.4%	475,268	94.9%	183,784	96.8%
			10 years	647,785	93.8%	466,494	93.2%	181,291	95.5%
			25 years	624,459	90.4%	449,065	89.7%	175,394	92.4%
1 adult, 1 child	Principal			154,211	100.0%	120,886	100.0%	33,325	100.0%
	Scotland adjusted	Adjusted for:	1 year	145,769	94.5%	114,408	94.6%	31,361	94.1%
			2 years	144,997	94.0%	113,816	94.2%	31,181	93.6%
			5 years	143,065	92.8%	112,306	92.9%	30,759	92.3%
			10 years	140,892	91.4%	110,638	91.5%	30,254	90.8%
			25 years	137,917	89.4%	108,648	89.9%	29,268	87.8%
	Urban-Rural adjusted	Adjusted for:	1 year	145,734	94.5%	114,250	94.5%	31,484	94.5%
			2 years	144,957	94.0%	113,685	94.0%	31,272	93.8%
			5 years	143,073	92.8%	112,359	92.9%	30,714	92.2%
			10 years	140,910	91.4%	110,833	91.7%	30,077	90.3%
			25 years	138,178	89.6%	109,492	90.6%	28,686	86.1%

Household Type	Projection			Scotland		Area Urban		Rural	
				Households	Diff.	Households	Diff.	Households	Diff.
1 adult 2+ children	Principal			94,847	100.0%	70,376	100.0%	24,471	100.0%
	Scotland adjusted	Adjusted for:	1 year	85,915	90.6%	63,846	90.7%	22,069	90.2%
			2 years	84,840	89.4%	63,057	89.6%	21,783	89.0%
			5 years	81,660	86.1%	60,705	86.3%	20,955	85.6%
			10 years	76,279	80.4%	56,758	80.6%	19,521	79.8%
			25 years	65,346	68.9%	49,116	69.8%	16,230	66.3%
	Urban-Rural adjusted	Adjusted for:	1 year	85,923	90.6%	62,986	89.5%	22,937	93.7%
			2 years	84,849	89.5%	62,100	88.2%	22,749	93.0%
			5 years	81,728	86.2%	59,548	84.6%	22,180	90.6%
			10 years	76,371	80.5%	55,256	78.5%	21,115	86.3%
25 years			65,723	69.3%	46,802	66.5%	18,921	77.3%	
2 person all adult	Principal			883,941	100.0%	578,886	100.0%	305,055	100.0%
	Scotland adjusted	Adjusted for:	1 year	896,810	101.5%	587,917	101.6%	308,893	101.3%
			2 years	897,843	101.6%	588,650	101.7%	309,193	101.4%
			5 years	900,042	101.8%	590,048	101.9%	309,994	101.6%
			10 years	904,142	102.3%	592,527	102.4%	311,615	102.2%
			25 years	933,149	105.6%	609,605	105.3%	323,544	106.1%
	Urban-Rural adjusted	Adjusted for:	1 year	896,796	101.5%	593,184	102.5%	303,612	99.5%
			2 years	897,829	101.6%	594,438	102.7%	303,391	99.5%
			5 years	899,831	101.8%	597,343	103.2%	302,489	99.2%
			10 years	903,812	102.2%	602,294	104.0%	301,518	98.8%
25 years			931,985	105.4%	624,060	107.8%	307,926	100.9%	
2+ adult 1+ children	Principal			323,604	100.0%	222,731	100.0%	100,873	100.0%
	Scotland adjusted	Adjusted for:	1 year	335,632	103.7%	231,193	103.8%	104,439	103.5%
			2 years	336,919	104.1%	232,096	104.2%	104,823	103.9%
			5 years	341,516	105.5%	235,235	105.6%	106,281	105.4%
			10 years	346,067	106.9%	238,236	107.0%	107,831	106.9%
			25 years	330,576	102.2%	226,254	101.6%	104,322	103.4%
	Urban-Rural adjusted	Adjusted for:	1 year	335,610	103.7%	232,182	104.2%	103,429	102.5%
			2 years	336,896	104.1%	233,210	104.7%	103,686	102.8%
			5 years	341,374	105.5%	236,755	106.3%	104,618	103.7%
			10 years	345,876	106.9%	240,514	108.0%	105,362	104.5%
25 years			329,682	101.9%	234,642	105.3%	95,040	94.2%	
3+ person all adult	Principal			142,943	100.0%	114,104	100.0%	28,839	100.0%
	Scotland adjusted	Adjusted for:	1 year	152,017	106.3%	121,422	106.4%	30,594	106.1%
			2 years	153,101	107.1%	122,295	107.2%	30,806	106.8%
			5 years	156,732	109.6%	125,186	109.7%	31,546	109.4%
			10 years	164,625	115.2%	131,447	115.2%	33,179	115.0%
			25 years	184,595	129.1%	146,930	128.8%	37,665	130.6%
	Urban-Rural adjusted	Adjusted for:	1 year	152,005	106.3%	120,023	105.2%	31,982	110.9%
			2 years	153,088	107.1%	120,735	105.8%	32,353	112.2%
			5 years	156,675	109.6%	123,056	107.8%	33,619	116.6%
			10 years	164,585	115.1%	128,262	112.4%	36,323	126.0%
25 years			184,514	129.1%	137,304	120.3%	47,210	163.7%	

Table C-2: Change in household numbers between 2010 and 2035, by local authority and projection

Local Authority	Projection											
	Principal			LS - 1 year			LS - 10 years			LS - 25 years		
	2010	2035	Change (%)	2010	2035	Change (%)	2010	2035	Change (%)	2010	2035	Change (%)
Scotland	2,357,424	2,890,381	22.6%	2,357,424	2,868,276	21.7%	2,357,424	2,850,950	20.9%	2,357,424	2,844,975	20.7%
Aberdeen City	103,677	143,686	38.6%	103,677	142,887	37.8%	103,677	142,207	37.2%	103,677	142,254	37.2%
Aberdeenshire	103,770	137,272	32.3%	103,770	136,015	31.1%	103,770	135,582	30.7%	103,770	135,621	30.7%
Angus	50,568	57,500	13.7%	50,568	57,013	12.7%	50,568	56,625	12.0%	50,568	56,494	11.7%
Argyll & Bute	41,609	41,940	0.8%	41,609	41,599	0.0%	41,609	41,304	-0.7%	41,609	41,242	-0.9%
Clackmannanshire	22,953	29,398	28.1%	22,953	29,121	26.9%	22,953	28,830	25.6%	22,953	28,602	24.6%
Dumfries & Galloway	68,408	71,553	4.6%	68,408	70,943	3.7%	68,408	70,508	3.1%	68,408	70,431	3.0%
Dundee City	70,401	81,669	16.0%	70,401	81,286	15.5%	70,401	80,875	14.9%	70,401	80,825	14.8%
East Ayrshire	53,722	59,393	10.6%	53,722	58,903	9.6%	53,722	58,623	9.1%	53,722	58,555	9.0%
East Dunbartonshire	43,010	44,975	4.6%	43,010	44,551	3.6%	43,010	44,437	3.3%	43,010	44,510	3.5%
East Lothian	42,798	59,449	38.9%	42,798	58,905	37.6%	42,798	58,541	36.8%	42,798	58,167	35.9%
East Renfrewshire	35,995	39,231	9.0%	35,995	38,863	8.0%	35,995	38,764	7.7%	35,995	38,643	7.4%
Edinburgh, City of	220,195	314,767	42.9%	220,195	313,638	42.4%	220,195	313,543	42.4%	220,195	315,824	43.4%
Eilean Siar	12,018	12,977	8.0%	12,018	12,873	7.1%	12,018	12,814	6.6%	12,018	12,885	7.2%
Falkirk	68,655	84,315	22.8%	68,655	83,528	21.7%	68,655	82,868	20.7%	68,655	82,447	20.1%
Fife	161,274	195,481	21.2%	161,274	193,838	20.2%	161,274	192,471	19.3%	161,274	191,694	18.9%
Glasgow City	282,196	361,343	28.0%	282,196	359,097	27.3%	282,196	355,582	26.0%	282,196	352,859	25.0%
Highland	101,833	128,255	25.9%	101,833	127,175	24.9%	101,833	126,319	24.0%	101,833	126,091	23.8%
Inverclyde	36,502	34,317	-6.0%	36,502	34,032	-6.8%	36,502	33,732	-7.6%	36,502	33,537	-8.1%
Midlothian	35,270	43,645	23.7%	35,270	43,203	22.5%	35,270	42,911	21.7%	35,270	42,696	21.1%
Moray	39,207	45,486	16.0%	39,207	45,190	15.3%	39,207	45,140	15.1%	39,207	45,330	15.6%
North Ayrshire	62,006	65,709	6.0%	62,006	65,092	5.0%	62,006	64,454	3.9%	62,006	64,075	3.3%
North Lanarkshire	144,865	167,131	15.4%	144,865	165,388	14.2%	144,865	164,003	13.2%	144,865	163,277	12.7%
Orkney Islands	9,308	11,505	23.6%	9,308	11,427	22.8%	9,308	11,385	22.3%	9,308	11,400	22.5%
Perth & Kinross	64,780	92,543	42.9%	64,780	91,838	41.8%	64,780	91,273	40.9%	64,780	90,928	40.4%
Renfrewshire	79,054	86,840	9.8%	79,054	86,118	8.9%	79,054	85,441	8.1%	79,054	85,004	7.5%
Scottish Borders	51,983	62,006	19.3%	51,983	61,599	18.5%	51,983	61,270	17.9%	51,983	61,310	17.9%
Shetland Islands	9,829	11,937	21.4%	9,829	11,834	20.4%	9,829	11,751	19.5%	9,829	11,733	19.4%
South Ayrshire	51,526	55,089	6.9%	51,526	54,624	6.0%	51,526	54,286	5.4%	51,526	54,232	5.3%
South Lanarkshire	137,228	162,979	18.8%	137,228	161,373	17.6%	137,228	160,144	16.7%	137,228	159,441	16.2%
Stirling	38,048	49,451	30.0%	38,048	49,115	29.1%	38,048	49,058	28.9%	38,048	49,312	29.6%
West Dunbartonshire	41,578	43,242	4.0%	41,578	42,890	3.2%	41,578	42,529	2.3%	41,578	42,302	1.7%
West Lothian	73,158	95,294	30.3%	73,158	94,319	28.9%	73,158	93,683	28.1%	73,158	93,252	27.5%

Table C-2 (Continued): Change in household numbers between 2010 and 2035, by local authority and projection

Local Authority	Projection											
	Principal			LUR - 1 year			LUR - 10 years			LUR - 25 years		
	2010	2035	Change (%)	2010	2035	Change (%)	2010	2035	Change (%)	2010	2035	Change (%)
Scotland	2,357,424	2,890,381	22.6%	2,357,424	2,868,227	21.7%	2,357,424	2,850,851	20.9%	2,357,424	2,844,805	20.7%
Aberdeen City	103,677	143,686	38.6%	103,677	142,881	37.8%	103,677	142,332	37.3%	103,677	142,607	37.5%
Aberdeenshire	103,770	137,272	32.3%	103,770	135,974	31.0%	103,770	135,050	30.1%	103,770	134,043	29.2%
Angus	50,568	57,500	13.7%	50,568	57,027	12.8%	50,568	56,512	11.8%	50,568	56,129	11.0%
Argyll & Bute	41,609	41,940	0.8%	41,609	41,603	0.0%	41,609	41,202	-1.0%	41,609	40,930	-1.6%
Clackmannanshire	22,953	29,398	28.1%	22,953	29,114	26.8%	22,953	28,858	25.7%	22,953	28,707	25.1%
Dumfries & Galloway	68,408	71,553	4.6%	68,408	70,945	3.7%	68,408	70,340	2.8%	68,408	69,966	2.3%
Dundee City	70,401	81,669	16.0%	70,401	81,267	15.4%	70,401	80,886	14.9%	70,401	80,871	14.9%
East Ayrshire	53,722	59,393	10.6%	53,722	58,886	9.6%	53,722	58,493	8.9%	53,722	58,232	8.4%
East Dunbartonshire	43,010	44,975	4.6%	43,010	44,573	3.6%	43,010	44,537	3.5%	43,010	44,726	4.0%
East Lothian	42,798	59,449	38.9%	42,798	58,893	37.6%	42,798	58,624	37.0%	42,798	58,480	36.6%
East Renfrewshire	35,995	39,231	9.0%	35,995	38,868	8.0%	35,995	38,835	7.9%	35,995	38,858	8.0%
Edinburgh, City of	220,195	314,767	42.9%	220,195	313,634	42.4%	220,195	313,795	42.5%	220,195	316,328	43.7%
Eilean Siar	12,018	12,977	8.0%	12,018	12,866	7.1%	12,018	12,801	6.5%	12,018	12,920	7.5%
Falkirk	68,655	84,315	22.8%	68,655	83,528	21.7%	68,655	82,978	20.9%	68,655	82,773	20.6%
Fife	161,274	195,481	21.2%	161,274	193,818	20.2%	161,274	192,745	19.5%	161,274	192,576	19.4%
Glasgow City	282,196	361,343	28.0%	282,196	359,021	27.2%	282,196	355,544	26.0%	282,196	352,973	25.1%
Highland	101,833	128,255	25.9%	101,833	127,196	24.9%	101,833	126,099	23.8%	101,833	125,454	23.2%
Inverclyde	36,502	34,317	-6.0%	36,502	34,033	-6.8%	36,502	33,762	-7.5%	36,502	33,619	-7.9%
Midlothian	35,270	43,645	23.7%	35,270	43,208	22.5%	35,270	42,986	21.9%	35,270	42,914	21.7%
Moray	39,207	45,486	16.0%	39,207	45,151	15.2%	39,207	44,924	14.6%	39,207	44,779	14.2%
North Ayrshire	62,006	65,709	6.0%	62,006	65,097	5.0%	62,006	64,539	4.1%	62,006	64,290	3.7%
North Lanarkshire	144,865	167,131	15.4%	144,865	165,412	14.2%	144,865	164,174	13.3%	144,865	163,639	13.0%
Orkney Islands	9,308	11,505	23.6%	9,308	11,428	22.8%	9,308	11,354	22.0%	9,308	11,310	21.5%
Perth & Kinross	64,780	92,543	42.9%	64,780	91,884	41.8%	64,780	91,120	40.7%	64,780	90,287	39.4%
Renfrewshire	79,054	86,840	9.8%	79,054	86,128	8.9%	79,054	85,548	8.2%	79,054	85,286	7.9%
Scottish Borders	51,983	62,006	19.3%	51,983	61,578	18.5%	51,983	61,032	17.4%	51,983	60,661	16.7%
Shetland Islands	9,829	11,937	21.4%	9,829	11,834	20.4%	9,829	11,727	19.3%	9,829	11,667	18.7%
South Ayrshire	51,526	55,089	6.9%	51,526	54,627	6.0%	51,526	54,212	5.2%	51,526	54,082	5.0%
South Lanarkshire	137,228	162,979	18.8%	137,228	161,405	17.6%	137,228	160,381	16.9%	137,228	160,037	16.6%
Stirling	38,048	49,451	30.0%	38,048	49,133	29.1%	38,048	49,070	29.0%	38,048	49,589	30.3%
West Dunbartonshire	41,578	43,242	4.0%	41,578	42,898	3.2%	41,578	42,573	2.4%	41,578	42,405	2.0%
West Lothian	73,158	95,294	30.3%	73,158	94,318	28.9%	73,158	93,818	28.2%	73,158	93,666	28.0%

Table C-3: Household numbers in 2035, by household type, local authority and projection

Local Authority	Projection	Household Type							All Households
		1 person male	1 person female	1 adult, 1 child	1 adult 2+ children	2 person all adult	2+ adult 1+ children	3+ person all adult	
Scotland	Principal	600,300	690,533	154,211	94,847	883,941	323,604	142,943	2,890,381
	LS - 1 year	583,379	668,754	145,769	85,915	896,810	335,632	152,017	2,868,276
	LS - 10 years	571,371	647,574	140,892	76,279	904,142	346,067	164,625	2,850,950
	LS - 25 years	569,660	623,733	137,917	65,346	933,149	330,576	184,595	2,844,975
	LUR - 1 year	583,371	668,788	145,734	85,923	896,796	335,610	152,005	2,868,227
	LUR - 10 years	571,512	647,785	140,910	76,371	903,812	345,876	164,585	2,850,851
	LUR - 25 years	570,264	624,459	138,178	65,723	931,985	329,682	184,514	2,844,805
Aberdeen City	Principal	37,954	31,774	5,626	3,758	40,455	15,547	8,575	143,686
	LS - 1 year	36,896	30,797	5,314	3,400	41,156	16,179	9,144	142,887
	LS - 10 years	36,464	30,163	5,310	3,190	41,016	16,347	9,717	142,207
	LS - 25 years	37,141	29,955	5,675	3,220	41,045	14,728	10,489	142,254
	LUR - 1 year	36,781	30,639	5,306	3,355	41,508	16,248	9,045	142,881
	LUR - 10 years	36,445	30,062	5,387	3,180	41,467	16,369	9,422	142,332
	LUR - 25 years	37,179	29,805	5,792	3,177	41,766	15,148	9,742	142,607
Aberdeenshire	Principal	22,459	28,459	4,903	3,830	52,503	20,882	4,235	137,272
	LS - 1 year	21,649	27,351	4,592	3,437	52,962	21,547	4,478	136,015
	LS - 10 years	21,158	26,433	4,422	3,031	53,425	22,255	4,859	135,582
	LS - 25 years	20,867	25,207	4,226	2,463	55,617	21,675	5,565	135,621
	LUR - 1 year	21,865	27,767	4,617	3,578	52,108	21,357	4,681	135,974
	LUR - 10 years	21,469	27,077	4,406	3,289	51,740	21,758	5,312	135,050
	LUR - 25 years	21,121	26,037	4,115	2,854	53,080	19,869	6,967	134,043
Angus	Principal	11,466	12,810	2,625	2,022	20,587	6,256	1,733	57,500
	LS - 1 year	11,115	12,381	2,473	1,824	20,884	6,492	1,843	57,013
	LS - 10 years	10,869	11,973	2,382	1,610	21,080	6,709	2,001	56,625
	LS - 25 years	10,720	11,418	2,277	1,308	21,945	6,534	2,292	56,494
	LUR - 1 year	11,212	12,558	2,483	1,897	20,525	6,427	1,925	57,027
	LUR - 10 years	11,013	12,254	2,371	1,744	20,393	6,551	2,187	56,512
	LUR - 25 years	10,835	11,786	2,215	1,513	20,923	5,983	2,874	56,129
Argyll & Bute	Principal	8,719	9,564	1,865	1,229	15,433	4,008	1,121	41,940
	LS - 1 year	8,458	9,251	1,758	1,110	15,667	4,162	1,193	41,599
	LS - 10 years	8,272	8,946	1,694	980	15,815	4,302	1,296	41,304
	LS - 25 years	8,158	8,531	1,619	796	16,464	4,190	1,484	41,242
	LUR - 1 year	8,533	9,382	1,766	1,154	15,401	4,121	1,244	41,603
	LUR - 10 years	8,383	9,155	1,686	1,062	15,304	4,201	1,411	41,202
	LUR - 25 years	8,247	8,804	1,575	921	15,703	3,839	1,841	40,930

Local Authority	Projection	Household Type							
		1 person male	1 person female	1 adult, 1 child	1 adult 2+ children	2 person all adult	2+ adult 1+ children	3+ person all adult	All Households
Clackmannanshire	Principal	5,988	7,344	1,710	1,415	9,059	2,980	901	29,398
	LS - 1 year	5,823	7,120	1,616	1,281	9,219	3,102	961	29,121
	LS - 10 years	5,696	6,887	1,557	1,131	9,308	3,207	1,044	28,830
	LS - 25 years	5,618	6,568	1,489	919	9,690	3,124	1,195	28,602
	LUR - 1 year	5,801	7,076	1,612	1,262	9,301	3,115	947	29,114
	LUR - 10 years	5,665	6,821	1,558	1,097	9,466	3,239	1,012	28,858
	LUR - 25 years	5,592	6,483	1,499	868	9,927	3,240	1,099	28,707
Dumfries & Galloway	Principal	12,423	17,603	2,818	2,142	26,613	7,706	2,247	71,553
	LS - 1 year	12,029	16,994	2,651	1,931	26,965	7,987	2,386	70,943
	LS - 10 years	11,761	16,431	2,554	1,704	27,214	8,253	2,590	70,508
	LS - 25 years	11,600	15,669	2,441	1,385	28,331	8,038	2,967	70,431
	LUR - 1 year	12,134	17,234	2,663	2,008	26,505	7,908	2,492	70,945
	LUR - 10 years	11,917	16,812	2,542	1,847	26,331	8,060	2,830	70,340
	LUR - 25 years	11,725	16,168	2,374	1,603	27,017	7,364	3,716	69,966
Dundee City	Principal	19,864	19,114	5,146	3,097	19,616	8,377	6,454	81,669
	LS - 1 year	19,699	18,914	5,060	2,999	19,570	8,376	6,668	81,286
	LS - 10 years	19,625	18,655	5,071	2,861	19,321	8,307	7,034	80,875
	LS - 25 years	20,095	18,556	5,260	2,800	19,201	7,280	7,632	80,825
	LUR - 1 year	19,671	18,847	5,067	2,975	19,721	8,396	6,591	81,267
	LUR - 10 years	19,592	18,555	5,101	2,817	19,597	8,360	6,864	80,886
	LUR - 25 years	20,028	18,356	5,287	2,689	19,699	7,626	7,186	80,871
East Ayrshire	Principal	10,865	13,005	3,045	1,950	20,235	7,799	2,494	59,393
	LS - 1 year	10,515	12,548	2,864	1,757	20,493	8,079	2,647	58,903
	LS - 10 years	10,281	12,132	2,758	1,550	20,680	8,348	2,874	58,623
	LS - 25 years	10,139	11,569	2,637	1,260	21,529	8,130	3,292	58,555
	LUR - 1 year	10,598	12,717	2,873	1,825	20,122	7,991	2,761	58,886
	LUR - 10 years	10,407	12,407	2,742	1,678	19,985	8,143	3,132	58,493
	LUR - 25 years	10,238	11,933	2,561	1,456	20,504	7,437	4,103	58,232
East Dunbartonshire	Principal	6,325	10,851	1,775	1,216	16,039	6,472	2,298	44,975
	LS - 1 year	6,095	10,425	1,662	1,091	16,174	6,676	2,429	44,551
	LS - 10 years	5,956	10,074	1,600	962	16,314	6,895	2,636	44,437
	LS - 25 years	5,874	9,607	1,529	782	16,984	6,715	3,019	44,510
	LUR - 1 year	6,070	10,357	1,658	1,075	16,320	6,700	2,392	44,573
	LUR - 10 years	5,922	9,970	1,600	934	16,598	6,960	2,554	44,537
	LUR - 25 years	5,846	9,473	1,539	740	17,407	6,952	2,768	44,726

Local Authority	Projection	Household Type							All Households
		1 person male	1 person female	1 adult, 1 child	1 adult 2+ children	2 person all adult	2+ adult 1+ children	3+ person all adult	
East Lothian	Principal	10,171	13,537	3,397	2,631	18,348	9,220	2,146	59,449
	LS - 1 year	9,847	13,067	3,196	2,371	18,589	9,555	2,279	58,905
	LS - 10 years	9,628	12,635	3,078	2,092	18,760	9,873	2,474	58,541
	LS - 25 years	9,496	12,049	2,942	1,700	19,530	9,616	2,834	58,167
	LUR - 1 year	9,806	12,982	3,188	2,335	18,747	9,590	2,245	58,893
	LUR - 10 years	9,571	12,506	3,078	2,029	19,071	9,970	2,399	58,624
	LUR - 25 years	9,448	11,885	2,960	1,606	19,998	9,976	2,607	58,480
East Renfrewshire	Principal	4,625	10,048	1,765	1,216	12,502	7,260	1,814	39,231
	LS - 1 year	4,456	9,652	1,653	1,091	12,606	7,487	1,917	38,863
	LS - 10 years	4,355	9,328	1,591	962	12,715	7,733	2,080	38,764
	LS - 25 years	4,295	8,895	1,521	782	13,237	7,531	2,383	38,643
	LUR - 1 year	4,438	9,587	1,649	1,075	12,717	7,514	1,888	38,868
	LUR - 10 years	4,329	9,228	1,591	933	12,932	7,806	2,015	38,835
	LUR - 25 years	4,274	8,767	1,530	739	13,562	7,801	2,185	38,858
Edinburgh, City of	Principal	70,526	70,496	12,003	6,962	89,286	35,597	29,896	314,767
	LS - 1 year	68,420	68,189	11,315	6,287	90,646	36,967	31,814	313,638
	LS - 10 years	66,908	65,940	10,901	5,549	91,495	38,205	34,544	313,543
	LS - 25 years	69,600	66,495	12,305	6,395	90,581	33,439	37,009	315,824
	LUR - 1 year	68,204	67,841	11,297	6,204	91,433	37,124	31,531	313,634
	LUR - 10 years	66,596	65,395	10,908	5,395	92,987	38,587	33,927	313,795
	LUR - 25 years	69,428	65,868	12,404	6,198	92,633	34,695	35,101	316,328
Eilean Siar	Principal	2,735	3,372	368	292	4,672	826	711	12,977
	LS - 1 year	2,673	3,280	362	281	4,706	831	741	12,873
	LS - 10 years	2,654	3,213	373	276	4,698	817	783	12,814
	LS - 25 years	2,751	3,201	435	313	4,723	642	821	12,885
	LUR - 1 year	2,675	3,304	355	282	4,635	835	780	12,866
	LUR - 10 years	2,665	3,260	362	283	4,555	810	865	12,801
	LUR - 25 years	2,815	3,331	453	365	4,430	508	1,019	12,920
Falkirk	Principal	16,876	20,759	5,018	3,064	26,155	9,349	3,095	84,315
	LS - 1 year	16,376	20,086	4,732	2,768	26,561	9,711	3,294	83,528
	LS - 10 years	16,016	19,424	4,559	2,443	26,812	10,037	3,577	82,868
	LS - 25 years	15,796	18,524	4,358	1,985	27,912	9,776	4,097	82,447
	LUR - 1 year	16,317	19,966	4,722	2,728	26,797	9,752	3,245	83,528
	LUR - 10 years	15,932	19,239	4,561	2,371	27,265	10,140	3,470	82,978
	LUR - 25 years	15,726	18,285	4,386	1,878	28,587	10,143	3,767	82,773

Local Authority	Projection	Household Type							
		1 person male	1 person female	1 adult, 1 child	1 adult 2+ children	2 person all adult	2+ adult 1+ children	3+ person all adult	All Households
Fife	Principal	36,903	47,160	11,694	7,009	62,772	22,476	7,468	195,481
	LS - 1 year	35,810	45,629	11,026	6,331	63,745	23,347	7,949	193,838
	LS - 10 years	35,022	44,128	10,624	5,588	64,347	24,131	8,632	192,471
	LS - 25 years	34,541	42,082	10,154	4,541	66,987	23,502	9,886	191,694
	LUR - 1 year	35,668	45,336	11,000	6,240	64,290	23,437	7,847	193,818
	LUR - 10 years	34,825	43,681	10,624	5,424	65,412	24,369	8,411	192,745
	LUR - 25 years	34,376	41,511	10,217	4,296	68,584	24,374	9,218	192,576
Glasgow City	Principal	98,884	97,258	29,947	12,038	70,975	30,364	21,877	361,343
	LS - 1 year	96,773	94,899	28,477	10,967	72,688	31,810	23,484	359,097
	LS - 10 years	94,720	91,853	27,461	9,687	73,435	32,905	25,522	355,582
	LS - 25 years	93,418	87,594	26,247	7,873	76,448	32,047	29,231	352,859
	LUR - 1 year	96,572	94,525	28,461	10,831	73,388	31,980	23,265	359,021
	LUR - 10 years	94,392	91,218	27,511	9,429	74,703	33,277	25,015	355,544
	LUR - 25 years	93,170	86,735	26,449	7,473	78,290	33,248	27,608	352,973
Highland	Principal	24,965	31,084	5,268	3,975	45,543	13,223	4,197	128,255
	LS - 1 year	24,200	30,043	4,962	3,586	46,200	13,721	4,463	127,175
	LS - 10 years	23,665	29,052	4,781	3,165	46,631	14,180	4,846	126,319
	LS - 25 years	23,339	27,705	4,569	2,572	48,545	13,811	5,550	126,091
	LUR - 1 year	24,404	30,461	4,981	3,728	45,383	13,578	4,662	127,196
	LUR - 10 years	23,972	29,723	4,756	3,428	45,083	13,839	5,298	126,099
	LUR - 25 years	23,583	28,590	4,442	2,974	46,252	12,640	6,974	125,454
Inverclyde	Principal	7,928	9,136	1,851	1,143	9,527	3,294	1,439	34,317
	LS - 1 year	7,714	8,864	1,750	1,035	9,701	3,431	1,536	34,032
	LS - 10 years	7,547	8,574	1,686	914	9,796	3,547	1,668	33,732
	LS - 25 years	7,443	8,177	1,612	743	10,198	3,455	1,911	33,537
	LUR - 1 year	7,691	8,816	1,747	1,021	9,796	3,447	1,515	34,033
	LUR - 10 years	7,511	8,498	1,688	888	9,972	3,584	1,621	33,762
	LUR - 25 years	7,415	8,076	1,624	703	10,457	3,582	1,762	33,619
Midlothian	Principal	6,684	9,864	2,606	2,238	14,610	5,919	1,723	43,645
	LS - 1 year	6,468	9,516	2,450	2,016	14,793	6,131	1,829	43,203
	LS - 10 years	6,323	9,201	2,360	1,778	14,928	6,335	1,985	42,911
	LS - 25 years	6,237	8,774	2,256	1,445	15,541	6,170	2,274	42,696
	LUR - 1 year	6,442	9,457	2,445	1,986	14,922	6,155	1,802	43,208
	LUR - 10 years	6,287	9,109	2,360	1,726	15,179	6,398	1,928	42,986
	LUR - 25 years	6,206	8,657	2,270	1,367	15,916	6,400	2,098	42,914

Local Authority	Projection	Household Type							
		1 person male	1 person female	1 adult, 1 child	1 adult 2+ children	2 person all adult	2+ adult 1+ children	3+ person all adult	All Households
Moray	Principal	8,324	9,822	799	400	18,019	6,657	1,466	45,486
	LS - 1 year	8,028	9,445	749	359	18,186	6,873	1,551	45,190
	LS - 10 years	7,846	9,128	721	316	18,346	7,099	1,683	45,140
	LS - 25 years	7,738	8,705	689	257	19,099	6,914	1,927	45,330
	LUR - 1 year	8,109	9,589	753	373	17,892	6,814	1,621	45,151
	LUR - 10 years	7,962	9,351	719	343	17,766	6,943	1,840	44,924
	LUR - 25 years	7,833	8,992	671	297	18,225	6,346	2,415	44,779
North Ayrshire	Principal	12,453	16,890	4,154	2,968	21,313	5,624	2,307	65,709
	LS - 1 year	12,108	16,373	3,925	2,686	21,686	5,854	2,460	65,092
	LS - 10 years	11,843	15,838	3,782	2,371	21,896	6,052	2,672	64,454
	LS - 25 years	11,681	15,104	3,615	1,927	22,794	5,894	3,060	64,075
	LUR - 1 year	12,065	16,276	3,917	2,648	21,887	5,879	2,423	65,097
	LUR - 10 years	11,782	15,686	3,785	2,302	22,279	6,114	2,591	64,539
	LUR - 25 years	11,631	14,907	3,640	1,823	23,363	6,115	2,811	64,290
North Lanarkshire	Principal	33,458	41,300	10,936	7,105	50,019	16,262	8,051	167,131
	LS - 1 year	32,463	39,953	10,310	6,417	50,786	16,890	8,568	165,388
	LS - 10 years	31,746	38,636	9,933	5,664	51,263	17,456	9,304	164,003
	LS - 25 years	31,310	36,845	9,494	4,603	53,367	17,002	10,656	163,277
	LUR - 1 year	32,365	39,742	10,295	6,329	51,265	16,971	8,445	165,412
	LUR - 10 years	31,601	38,299	9,944	5,499	52,158	17,647	9,026	164,174
	LUR - 25 years	31,194	36,402	9,565	4,352	54,684	17,651	9,790	163,639
Orkney Islands	Principal	2,152	2,919	293	128	4,231	1,410	372	11,505
	LS - 1 year	2,085	2,819	277	117	4,279	1,457	393	11,427
	LS - 10 years	2,073	2,760	287	123	4,262	1,467	414	11,385
	LS - 25 years	2,122	2,711	319	147	4,313	1,341	448	11,400
	LUR - 1 year	2,102	2,858	277	120	4,212	1,447	412	11,428
	LUR - 10 years	2,064	2,788	265	110	4,184	1,474	469	11,354
	LUR - 25 years	2,099	2,749	286	134	4,183	1,268	591	11,310
Perth & Kinross	Principal	18,170	21,014	4,128	3,170	31,178	12,091	2,792	92,543
	LS - 1 year	17,618	20,315	3,889	2,861	31,636	12,550	2,969	91,838
	LS - 10 years	17,229	19,646	3,747	2,525	31,932	12,970	3,224	91,273
	LS - 25 years	16,992	18,735	3,582	2,052	33,242	12,632	3,693	90,928
	LUR - 1 year	17,776	20,609	3,906	2,976	31,087	12,425	3,105	91,884
	LUR - 10 years	17,463	20,114	3,730	2,737	30,881	12,666	3,530	91,120
	LUR - 25 years	17,179	19,347	3,483	2,375	31,679	11,569	4,654	90,287

Local Authority	Projection	Household Type							
		1 person male	1 person female	1 adult, 1 child	1 adult 2+ children	2 person all adult	2+ adult 1+ children	3+ person all adult	All Households
Renfrewshire	Principal	18,717	21,676	4,781	3,084	25,623	9,463	3,497	86,840
	LS - 1 year	18,188	21,000	4,514	2,790	26,056	9,843	3,727	86,118
	LS - 10 years	17,789	20,312	4,350	2,462	26,305	10,174	4,048	85,441
	LS - 25 years	17,545	19,370	4,158	2,001	27,385	9,909	4,636	85,004
	LUR - 1 year	18,128	20,886	4,507	2,751	26,297	9,886	3,672	86,128
	LUR - 10 years	17,703	20,133	4,353	2,392	26,762	10,280	3,925	85,548
	LUR - 25 years	17,475	19,137	4,187	1,894	28,061	10,276	4,256	85,286
Scottish Borders	Principal	11,415	13,499	1,981	1,751	25,267	6,666	1,426	62,006
	LS - 1 year	11,061	13,042	1,865	1,579	25,621	6,915	1,516	61,599
	LS - 10 years	10,816	12,611	1,797	1,393	25,860	7,146	1,646	61,270
	LS - 25 years	10,668	12,026	1,717	1,132	26,921	6,960	1,885	61,310
	LUR - 1 year	11,171	13,242	1,875	1,643	25,207	6,853	1,587	61,578
	LUR - 10 years	10,974	12,923	1,790	1,511	25,043	6,986	1,805	61,032
	LUR - 25 years	10,796	12,429	1,672	1,311	25,692	6,380	2,381	60,661
Shetland Islands	Principal	2,273	3,114	370	334	4,344	1,139	362	11,937
	LS - 1 year	2,203	3,009	348	301	4,405	1,182	385	11,834
	LS - 10 years	2,154	2,909	336	266	4,446	1,221	418	11,751
	LS - 25 years	2,124	2,774	321	216	4,629	1,189	479	11,733
	LUR - 1 year	2,222	3,050	350	313	4,328	1,170	402	11,834
	LUR - 10 years	2,183	2,975	334	288	4,300	1,192	456	11,727
	LUR - 25 years	2,147	2,861	312	250	4,411	1,089	597	11,667
South Ayrshire	Principal	10,187	13,190	2,586	1,854	19,280	5,724	2,269	55,089
	LS - 1 year	9,872	12,744	2,435	1,672	19,552	5,938	2,412	54,624
	LS - 10 years	9,653	12,323	2,346	1,476	19,734	6,136	2,618	54,286
	LS - 25 years	9,520	11,752	2,242	1,199	20,544	5,976	2,999	54,232
	LUR - 1 year	9,948	12,913	2,443	1,738	19,196	5,872	2,517	54,627
	LUR - 10 years	9,771	12,599	2,332	1,598	19,068	5,984	2,858	54,212
	LUR - 25 years	9,613	12,118	2,178	1,387	19,564	5,466	3,757	54,082
South Lanarkshire	Principal	31,160	40,195	9,558	6,377	50,870	17,993	6,825	162,979
	LS - 1 year	30,211	38,855	9,005	5,756	51,614	18,674	7,258	161,373
	LS - 10 years	29,542	37,573	8,675	5,079	52,095	19,299	7,881	160,144
	LS - 25 years	29,136	35,830	8,292	4,128	54,233	18,796	9,026	159,441
	LUR - 1 year	30,107	38,634	8,989	5,675	52,089	18,755	7,155	161,405
	LUR - 10 years	29,393	37,226	8,681	4,933	52,999	19,498	7,651	160,381
	LUR - 25 years	29,015	35,380	8,349	3,906	55,574	19,496	8,317	160,037

Local Authority	Projection	Household Type							
		1 person male	1 person female	1 adult, 1 child	1 adult 2+ children	2 person all adult	2+ adult 1+ children	3+ person all adult	All Households
Stirling	Principal	8,380	10,353	2,274	1,395	17,150	6,485	3,414	49,451
	LS - 1 year	8,095	9,971	2,134	1,254	17,337	6,706	3,618	49,115
	LS - 10 years	7,912	9,638	2,055	1,106	17,492	6,928	3,926	49,058
	LS - 25 years	8,203	9,591	2,193	1,128	17,643	6,290	4,264	49,312
	LUR - 1 year	8,155	10,102	2,141	1,303	17,011	6,630	3,792	49,133
	LUR - 10 years	8,007	9,854	2,042	1,197	16,887	6,754	4,329	49,070
	LUR - 25 years	8,645	10,248	2,350	1,482	16,263	5,282	5,320	49,589
West Dunbartonshire	Principal	9,904	11,102	3,042	1,294	11,789	4,192	1,918	43,242
	LS - 1 year	9,640	10,775	2,877	1,173	12,009	4,368	2,048	42,890
	LS - 10 years	9,431	10,423	2,773	1,035	12,126	4,516	2,224	42,529
	LS - 25 years	9,301	9,940	2,651	842	12,623	4,399	2,547	42,302
	LUR - 1 year	9,613	10,721	2,874	1,157	12,125	4,389	2,018	42,898
	LUR - 10 years	9,390	10,335	2,777	1,007	12,342	4,565	2,158	42,573
	LUR - 25 years	9,269	9,824	2,670	797	12,940	4,564	2,341	42,405
West Lothian	Principal	17,347	22,220	5,877	3,759	29,927	12,343	3,822	95,294
	LS - 1 year	16,792	21,446	5,528	3,387	30,317	12,790	4,058	94,319
	LS - 10 years	16,418	20,735	5,325	2,989	30,595	13,216	4,405	93,683
	LS - 25 years	16,192	19,774	5,090	2,429	31,851	12,872	5,045	93,252
	LUR - 1 year	16,728	21,315	5,516	3,338	30,581	12,842	3,998	94,318
	LUR - 10 years	16,328	20,533	5,326	2,900	31,106	13,350	4,274	93,818
	LUR - 25 years	16,118	19,514	5,122	2,295	32,614	13,356	4,646	93,666